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Murals and the Development of Merchant Activity at Chichen Itza

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MURALS AND THE DEVELOPMENT OF MERCHANT ACTIVITY AT CHICHEN ITZA

by

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As Chair of the candidate's graduate committee, I have read the thesis of Lucha Aztzin Martinez de Luna in its final form and have found that (1) its format, citations, and bibliographical style are consistent and acceptable and fulfill university and department style requirements; (2) its illustrative materials including figures, tables, and charts are in in place; and (3) the final manuscript is satisfactory to the graduate committee and is ready for submission to the university library.

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ABSTRACT

MURALS AND THE DEVELOPMENT OF MERCHANT ACTIVITY AT CHICHEN ITZA

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Masters of Arts

The militaristic interpretations of the art of Chichen Itza, Yucatán, Mexico, fails to sufficiently describe its entire decorative program. Absent from discussions of the art tradition is the apparent focus on merchant activity in the city. The influence and power of merchants strengthened during the transition from the Classic to Postclassic in Mesoamerica. With an increase in demand of foreign goods, new exchange relationships developed between centers in Central Mexico, the Gulf, and Maya region. As a result, several cultural regions participated in a vast economic network that created political alliances and syncretic art styles. Focusing on the mural tradition of Chichen Itza, this study proposes a chronological sequence for the wall paintings by examining their style, subject matter, and architectural setting. Analysis of the painted images demonstrates the progressive development of merchant activity in the city and its influence in establishing Chichen Itza as one of the major centers of long-distance trade by the Terminal Classic.

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I. Introduction

In the early 1900s, the site of Chichen Itza was one of the more popular archaeological destinations for scholars and explorers. During this period, fragments of frescoes were reported and recorded in several areas of the city. Wall paintings covering substructure panels were found intact in the early twentieth century in the Upper Temple of the Jaguars, Las Monjas, the Temple of the Warriors, the Temple of the Chac Mool, the Northwest Colonnade, the Temple of the Tables, and the Temple of the Owls. The majority of the frescoes were meticulously recorded in the early 1900s by Adela Breton when the site underwent large-scale restorations and archaeological excavations.

By examining recordings from the early 1900s and multispectral images[1] of the

[1] In October of 2001, Gene Ware of Brigham Young University and I recorded the only remaining mural images in the Upper Temple of the Jaguars, which included seventy-five percent of the south wall, twenty-five percent of the upper west and three shots from the east wall. The scenes were documented at "visible and near infrared wavelengths" (Ware, Brady, and Martin 1999:1) with multispectral imaging techniques. Using a Kodak Megaplus Camera (Model 4.2i) of spatial resolution 2024 by 2044 pixels several images from the same scene were taken at different wavelengths. These images were then stacked on top of each other to form a multispectral image cube. This multispectral image cube was then processed with a computer to reveal images based on their spectral differences (Ware, Brady, and Martin 1999:1). By manipulating the intensity of color, brightness and contrast, images within the painting were altered to pull out details not easily visible. Subsequently, details of iconography and artistic technique and method were enhanced with this technology. Unfortunately, six months prior to our arrival at Chichen Itza, amateur restorers from the University of Merida, Yucatán, attempted to consolidate and restore the south wall and portions of the west wall. Due to inadequate materials and lack of experience, that which remains of the murals in the Upper Temple of the Jaguars was dramatically altered. As a result, the multispectral imaging techniques could not document beyond the recent application of oil based pigments applied to the original murals. Beginning in February 2005 conservators will try to reverse the damage and stabilize the painted wall panels.

murals a narrative program unfolds revealing alliances, trade campaigns, rituals, and conflicts in the city. Although most of these murals have been selectively cited in archaeological studies, they have not been analyzed in a comprehensive group nor have they been recognized for their references to merchant activity.

Beginning with a brief introduction of pre-Columbian mural painting and a review of mural evidence from the Maya region, a transition in the Maya archaeological record reveals a change from the emphasis of writing, commemorating the lives of elite individuals, to painting and sculpting narratives. This may be related to the shift in population intensity, strata of society and adjustments in the political economy to cope with environmental/social changes. Unlike the southern and central Lowlands, in the northern Lowlands the Maya may have dealt with these drastic changes by enlarging their interaction network by extending kinship systems, creating fictive kin, cultivating trading partnerships, and expropriating the goods of neighbors (Dahlin 2002:333).

The group of murals from Chichén Itzá will be discussed by describing each structure containing a mural and the imagery found in each wall painting, followed by a comprehensive analysis of their style, subject matter and architectural setting, along with a proposed chronological sequence. I believe that the art of Chichen Itza, especially the murals, depict these economic and sociopolitical changes noted in the Maya region.

In the second part, interpretations of the political economy of Chichen Itza will be reviewed, concluding with a comparative discussion of ethnohistoric and visual data of shared images and referents from the site, Central Mexico, the Gulf and Maya region to demonstrate how the murals of Chichen Itza provide references to the development of

merchant activity in the city.

1. Chichen Itza

Located in the center of Northern Yucatán, Mexico, midway between the eastern and western coast, Chichen Itza is approximately 100 kilometers from the coastal salt beds in the north and the fertile agricultural land of the Puuc red hills in the south. The Maya city flourished during the Late Classic (between A.D. 750 and 900) and during a portion of the Postclassic (A.D. 900 to 1100) (Andrews et al. 2003:152; Schmidt 1998:432).

The site of Chichen Itza covered approximately 30 square kilometers and was formed by a network of architectonic nuclei of different sizes, more concentrated and monumental towards the center with walls protecting the core area (Schmidt 1999:33). At least 75 *sacb´eob´* join in a cruciform pattern at the center of the site (Schmidt 1999:33). Connected by this network of *sacb´eob´*, at distances between 200 m and 700 m of each other, are groups of monumental architecture with smaller habitation groups interspersed throughout the site (Schmidt 1994:41). The structures of habitation vary in complexity from small platforms designed to accommodate isolated straw and *bajareque* (plaited cane and mud houses) to more complex structures with patios, several rooms, passages, columns, and stairways (Schmidt 1999:439).

At the site's center in the central-northern zone, there are three main groups of plazas and terraces (Fig.2): 1) the group of the Nunnery Complex and the group of the Red House; 2) the Group of Osario; 3) and the group of the plaza of the Castillo and the

group of the Thousand Columns (Schmidt 1998:436).

Two distinct public architectural styles: Chichen-Puuc and Chichen-Toltec or Maya and Toltec have been used, to describe this urban landscape. The first architectural style, Chichen-Puuc, is a local variant of a common style of the Yucatán and Campeche during the Terminal Classic period. The second architectural style, Chichen-Toltec, is a combination of the first style with forms and concepts from central and northern Mexico, and also the Gulf Coast and Oaxaca (Schmidt 1998:439).

The majority of the Puuc-style buildings are concentrated in the southern part of the site. The Puuc-style structures with mosaic-decorated upper facades containing hieroglyphic lintels with dates between A.D. 832 and 881 include: the Nunnery Complex (Monjas, Annex, and Iglesia), the Akab Dzib, the Caracol, the House of Deer, the Red House, the Temple of the Hieroglyphic Jambs, and the Temple of the Three Lintels (Kowalski 1999:417).

The architectural style known as Chichen-Toltec predominates at the site, especially in the northern portion of the city. The group of Osario situated on its own walled platform, contains the Osario structure, the House of the Metates, the Atlantean Columns, and a series of elaborate platforms connecting with a *sacb´e* the Temple of Xtoloc and the cenote of Xtoloc (Schmidt 1994:41).

The Plaza of the Castillo, at the northern section, spans 1.5 km. in length and features the tallest pyramid of the site, El Castillo. The plaza is elaborately decorated with wide galleries, and colonnades originally roofed with Maya vaults, the *tzompantli*, three ball courts, the Venus Platform, the Eagle Platform, and the Temple of the

Warriors. This walled area connects with a *sacb´e* that leads to the Sacred Cenote (Schmidt 1998:436).

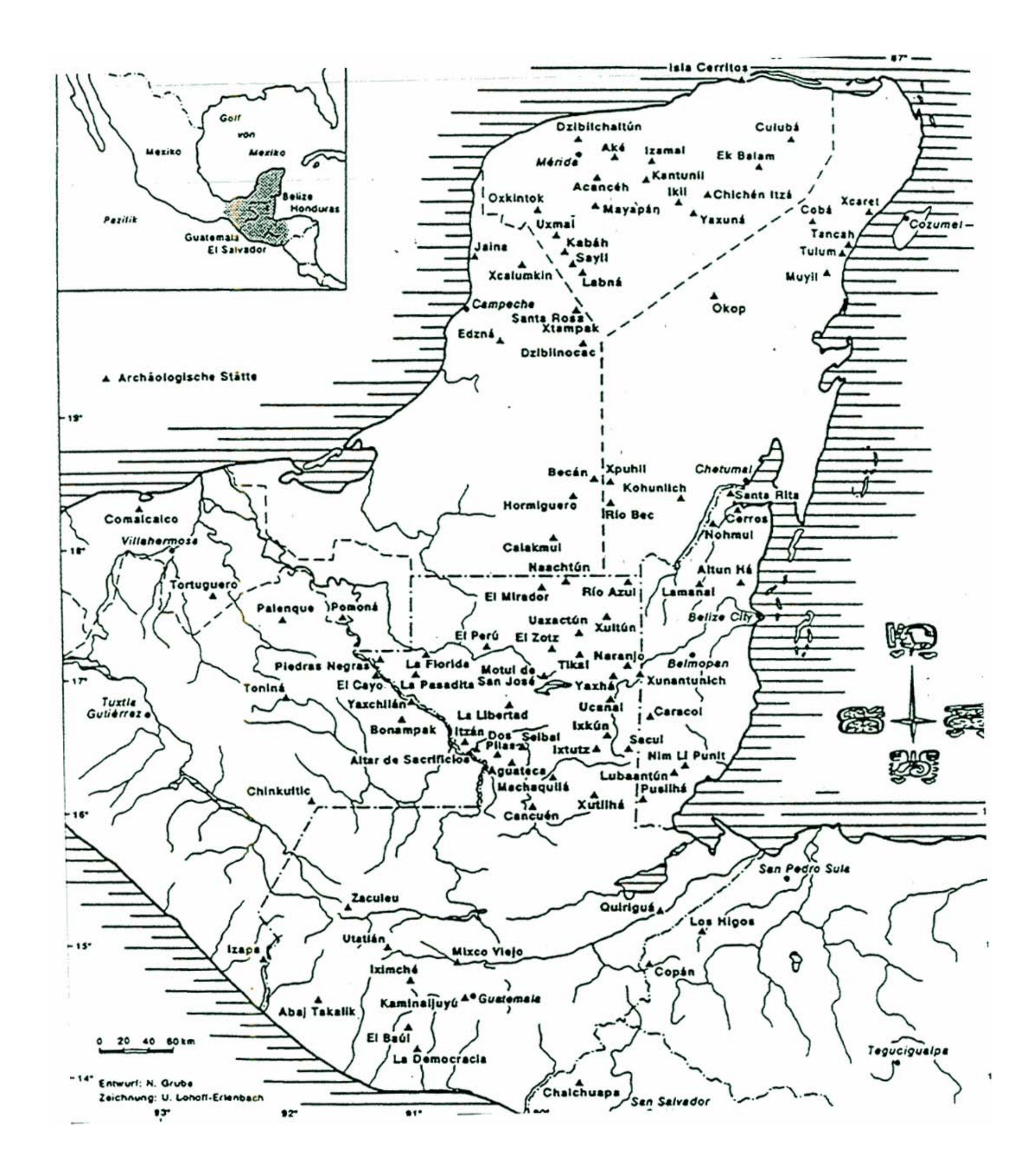


Figure 1 Map of the Maya Region. From Grube (2004:II-A)

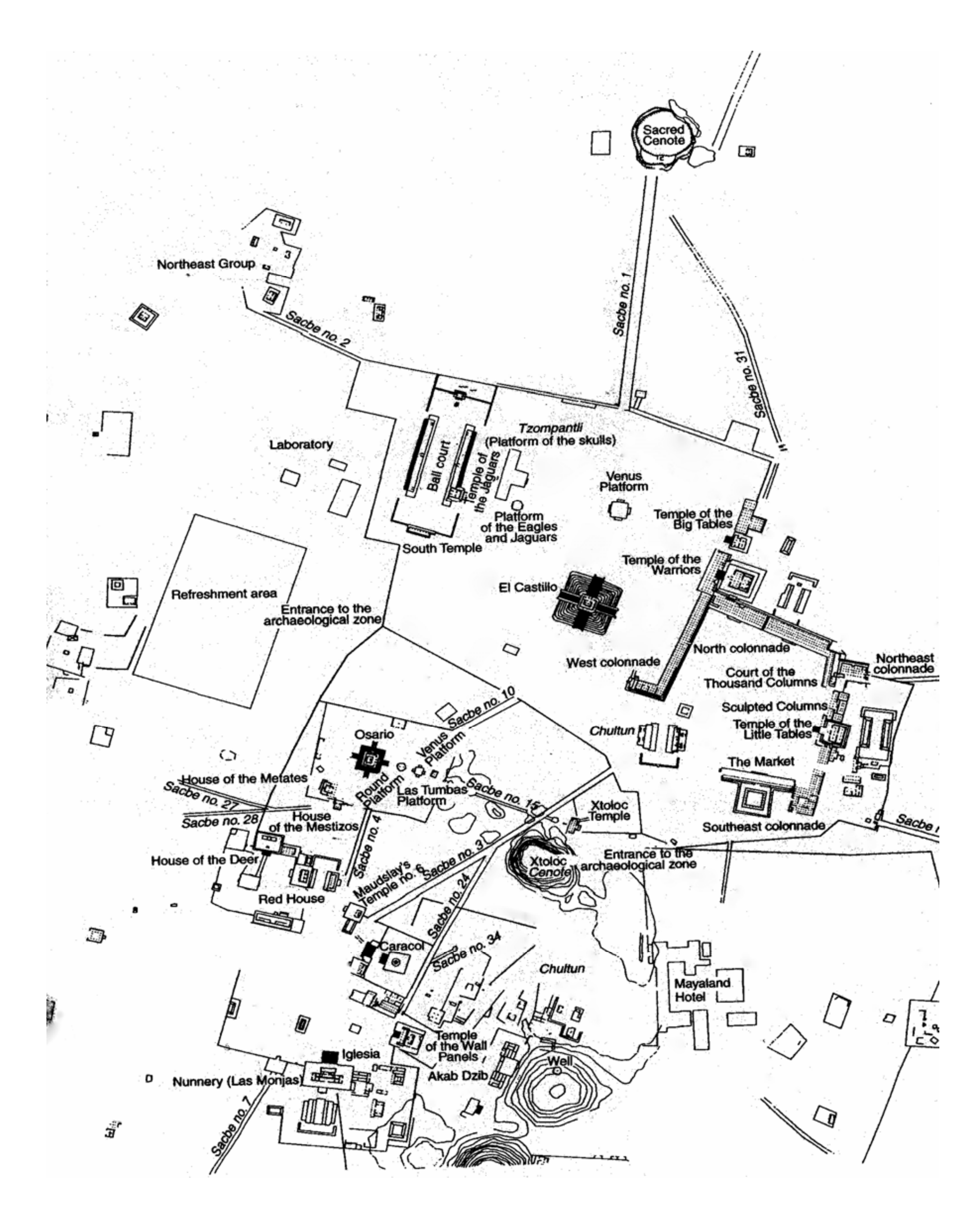


Figure 2 Map of Chichen Itza. From Schmidt (1999:431)

2. Historical Interpretations of Chichen Itza

Historically, interpretations of the art of Chichen Itza have generally focused on militaristic themes and the relationship and origin of influence between Chichen Itza and Tula, Hidalgo, a Postclassic city-state in Central Mexico. Desiré Charnay was the first explorer who reported the resemblance between the two sites in his book, *Ancient Cities of the New World: Being Travels and Explorations in Mexico and Central America from 1857-1882*. He recognized the similarities between the sculptures, particularly the plumed serpent columns at the doorways of major buildings. After Charnay, additional similarities of architectural features such as: large I-shaped ball courts associated with *tzompantlis*, corresponding tribunes, daises or dance platforms, colonnaded halls, Atlanteans, and *chacmools* were noted (Jones 1995:6). These and several other "non-Maya" features found in the art and architecture of Chichen Itza prompted suggestions of a foreign presence in the city. However, this composition of shared traits is not unique to Chichen Itza and can be identified in several contemporaneous sites throughout Mesoamerica (Cholula, Cacaxtla, Xochicalco, El Tajin, coastal Tabasco, and the Puuc sites) beginning during a period which Jiménez Moreno (1966) termed the Epiclassic.

The Epiclassic period (A.D. 700-900) began with the decline of the economic and political power of Teotihuacan in Central Mexico and the appearance of overlapping stylistic resemblances in architecture, sculpture, and ceramics. According to Webb these traits appear to link "highlands to central Gulf Coast, central Gulf Coast to Tabasco-Campeche, Tabasco-Campeche to Puuc, Tabasco-Campeche to Guatemala highlands" (Webb 1973:161). This linkage of sub-regions, similar to the Gulf Coast-Yucatán-

highland Guatemala trade network, reported to exist at the time of the Spanish Conquest (Chapman 1957), may have commenced by the end of the Classic period (Webb 1973:162). However, the type of sumptuary goods traded became more diverse from the Early Classic/Classic to the Terminal Classic/Postclassic, with more elites and societies involved in a broader geographic interaction.

According to Jiménez Moreno this period marked a sociopolitical change in Mesoamerica when the "Classic pattern of theocracy and centralization changed to a Post-Classic pattern of militaristic states" (1966:49). Webb suggests that during this specific period in Mesaoamerican history military activity was significantly more apparent in the archaeological record. This generalization is difficult to prove when considering the lengthy history of militarism in Mesoamerica. Warfare was probably not the dominant factor in the transition from Classic to Postclassic, but rather increasingly intense trade activity.

During the Epiclassic period, states in Central Mexico, the Gulf Coast, the Pasion-Usumacinta Region, Central and Far Northern Peten, Eastern Lowlands, and the Puuc area were flourishing. Legitimizing their social and economic position, these centers linked themselves to well-established pan-Mesoamerican ideological concepts through distinct public programs of monumental sculptures, reliefs, and murals. These public works indicate intense interaction between cultural regions, although each center possessed unique traits. However, by the end of this period several centers declined while Chichen Itza was preparing for the greatest expansion of its history, resulting in one of the largest and stylistically most complex cities in the Yucatán Peninsula.

The eclectic iconography of Chichen Itza and its similarities with Tula have resulted in several proposed hypotheses and chronological histories describing the Late Classic to Early Postclassic transition in Mesoamerica. The majority of these hypotheses are based on a comparative analysis of art and architectural styles.

During the mid-twentieth century, archaeologists split the history of Chichen Itza into two discrete, sequential cultural periods. The most traditionally accepted hypothesis was formulated by Tozzer (1957) who claimed that the architecture and art style native to the northern lowlands, as exemplified by the Late Classic phase at Chichen Itza, was quickly replaced in the Postclassic when the Toltecs from Tula, Hidalgo, entered and conquered Chichen Itza and introduced a distinctive Mexican architectural style, which he designated as Chichen-Toltec (Tozzer 1957:16).

In contrast to Tozzer's hypothesis, J. Eric S. Thompson (1970:119-134) proposed that the Itza, who founded Chichen Itza, were Chontal (or Putun) Maya with Central Mexican influences from southwestern Campeche and eastern Tabasco. According to Thompson, the Itza were responsible for the shift in architecture and art styles at Chichen Itza, followed by the arrival of a Toltec group under the leadership of Ce Acatl Topiltzin Quetzalcoatl who introduced other elements such as the feathered serpent columns and Atlanteans to the site. Both Tozzer and Thompson relied heavily on ethnohistorical data to defend their hypotheses. Supporting this sequential chronological pattern, Brainerd (1954:39-44) proposed that the three ceramic complexes (Motul, Cehpech, and Sotuta) corresponding to the period in question were also sequential and could be correlated with these phases of occupation.

Some current hypotheses postulate a partial (Andrews V:319; Ball 1979; and Sabloff 1986:452) overlap of the Cehpech and Sotuta ceramic complexes and the Chichen-Toltec and Chichen-Puuc styles of public architecture (Cohodas 1989:230). Lincoln (1994:7,361) proposed a total overlap, a contemporaneity in the ceramics and architecture. The most recent studies of ceramics recovered from controlled stratigraphic excavations from the "Proyecto Chichen Itza" (1993-Present) reveal a ceramic sequence with each complex associated with a distinct architectonic style and diagnostic foreign material evidence (Pérez de Heredia Puente 2004:18). At the regional level, a certain degree of overlap exists between the Cehpech and Sotuta ceramic complexes (Pérez de Heredia Puente 2004:18; Rice and Forsyth 2004:48). According to Pérez de Heredia Puente (2004:18), the duration of this overlap depends on the dating of the late phase of Cehpech at the different Puuc sites, the eastern and the western Yucatán zones. In addition, "in some sites/areas there are geographical subspheres of Cehpech (eastern and western) as well as chronological faceting that can be correlated with different architectural styles" (Rice and Forsyth 2004:48).

With regard to ethnicity and the possible sources of cultural influence at Chichen Itza, the level of complexity at this archaeological site is problematic. Once again, given the eclectic trend of this period, it is not at all surprising that the source of possible influence can be traced to disparate regions. However, scholars (Schele and Mathews 1998:253; Schmidt 1999:446) insist the city's traits maintain a Maya continuity through the Puuc, Chenes, and Rio Bec styles from the Classic period. Other scholars suggest that the 'Chichen Itza International Art Style' incorporated much of the style of the

Mexican Highlands (Greene Robertson 1991:103), but shared similarities in art and architecture with sites along the Usumacinta-Pasion drainage (Kowalski 1989:177,181; Cohodas 1989:227), the Soconusco region and Comitan Valley of Chiapas, the Pacific Coast of Guatemela, in the region of El Baul and Cotzumalguapa (Schmidt 1999:444), central and northern Mexico, the Gulf Coast, Oaxaca (Schmidt 1999:439), as well as Northern Yucatán (Kowalski 1989:181), indicating a large and interconnected network. Scholars propose (Schmidt 1999:445; Wren and Schmidt 1991:224; Andrews et al. 2003:153) that the Mexicanized and Maya artistic and building styles indicate that different groups lived together in a possible extended and fictive kinship system (Dahlin 1999:327) distinguishable by their costumes and weapons.

Detecting shared characteristics between Chichen Itza and other Mesoamerican areas confirms the intensity of interaction during the Terminal Classic to Early Postclassic periods. Of all the centers that thrived in this period, Chichen Itza was the most prolific. Regardless of its eclecticism, Chichen Itza displays continuous internal development in its own style, devising innovative techniques to accommodate a growing elite/administrative and military populace in the city. The city was an economically powerful force in its region and abroad. Signs of hosting large public events with numerous participants are apparent in the overall size of the site's nucleus, interior spaces particularly the colonnaded structures surrounding the Temple of the Warriors, as well as the quantity and content of public art.

Public art reveals that warriors, ballplayers, priests, deity impersonators, lords, women, and merchants played active roles in cultural/social events within the city.

Previous studies have focused heavily on the art of the city to describe the culture of the Itza.   In, the following section I will briefly review previous scholarship focused on the murals at Chichen Itza.

II. Previous Scholarship of Murals

1. Upper Temple of the Jaguars

The first written accounts describing the Maya region which mention the site of Chichen Itza include: *Les Monuments de l'Yucatán* (1841) by Emmanuel von Friederichsthal; *Incidents of Travel in Yucatán* (1843) by John Lloyd Stephens and illustrator Frederick Catherwood; *Rambles in Yucatán* (1843) by Benjamin Norman; and *Relación de las cosas de Yucatán* written in approximately 1566 by Diego de Landa and translated first in French by l'Abbé Brasseur de Bourbourg in (1864). In the two-volume book, *Incidents of Travel in Yucatán*, Stephens briefly described the murals in the Upper Temple of the Jaguars as he saw them in 1842:

> . . . the walls and ceiling of which are covered, from the floor to the peak of the arch, with designs in painting, representing in bright and vivid colours, human figures, battles, houses, trees, and scenes of domestic life, and conspicuous on one of the walls is a large canoe; but the first feeling of gratified surprise was followed by heavy disappointment, for the whole was mutilated and disfigured. In some places the plaster was broken off; in every part deep and malignant scratches appeared in the walls and while individual figures were entire, the connection of the subjects could not be made out. For a long time we had been tantalized with fragments of painting, giving us the strong impression that in this more perishable art these aboriginal builders had made higher attainments than in that of sculpture, and we now had proofs that our impression did them justice. (Stephens 1963:211)

At the time of its publication, *Incidents of Travel in Yucatán* was an international bestseller. Although such publications aroused a great deal of interest, archaeological explorations in Mexico and Central America did not begin until the late 1800s and early 1900s because of difficulties in traveling through this area of the world. Yet with the onset of the railway and steamboat, large-scale scientific research and expeditions began

in Middle America.   Some of the first pre-Columbian cities explored by scholars were Chichen Itza, Copan, Yaxchilan, and Palenque

Between 1881 and 1895, Alfred Percival Maudslay traveled throughout Mexico and Central America documenting several Maya centers. In each prehispanic city Maudslay studied, he followed a research format. The format included: establishing the geographic position of the site; surveying the site; measuring and photographing the buildings; moulding in paper or plaster sculptured monuments and hieroglyphic inscriptions; comparing monuments and inscriptions of the same locality; and finally comparing the different groups of monuments at various sites (Maudslay 1889-1902:Vol.V:3). The final reports of Maudslay's travels were published in an eight-volume series entitled, *Archaeoloogy. Biologia Centrali-Americana*, considered the first scientific publication of the Maya region.

In Maudslay's book he described the condition of the murals in the Upper Temple of the Jaguars since Stephen's visit:

> If such were the condition of the walls in 1843 I expected to find very little remaining in 1888. However, although much of the plaster had fallen since the time of Stephen's visit, and the floor was high with fragments of plaster and rubbish, and although the paintings had been further ruthlessly damaged by visitors from the neighbouring towns and villages, who, with the point of a charred stick, had written their names in large letters all over the walls, yet there is still so much remaining of great interest that I deeply regret not having provided myself with materials for making tracings of all that is sufficiently distinct.
>
> The fragments which I am now able to reproduce were traced on thin bank-post letter-paper, then transferred to the linen-back paper which had been prepared for my large plane-table, and were colored on the spot. (Maudslay 1889-1902, vol.5:30)

In addition to his monumental eight-volume works, Maudslay collaborated with his wife Anne Cary Maudslay and published a "less ambitious and less expensive" book

documenting his travels and briefly describing the ruins he visited (Maudslay and Maudslay 1899b). In the book *A Glimpse at Guatemala, and Some Notes on the Ancient Monuments of Central America*, the Maudslays briefly describe the panel above the temple doorway and the panel on the south side of the doorway. Maudslay traced the better-preserved images and transferred them onto drawing paper (Maudslay and Maudslay 1899:206).

Maudslay's work coincided with expeditions to Middle America sponsored by the Peabody Museum of Archaeology and Ethnology of Harvard University between 1888 and 1915. During this period several independent scholars and other curious individuals were also traveling throughout the Americas exploring and studying several archaeological sites. Among these early explorers was Adela Breton, an independently wealthy English "artist and adventurer" who met Maudslay while traveling through Mexico (McVicker 2000:60). Interested in the area, Breton asked Maudslay "if there was work she could do while she was in Mexico" (McVicker 2000:60). Maudslay's determination to record the murals as thoroughly as possible resulted in a collaboration with her. Breton was contracted by Maudslay in 1900 to verify his drawings of Chichen Itza that he wanted to include in his *Biologia-Centrali-Americana*. At the time he commented to Breton "that there would be nothing more valuable than a record of the murals at Chichen Itza" (McVicker 2000:60).

Breton arrived in Chichen Itza as a guest of Edward H. Thompson. Thompson, the United States Consul at Mérida owned a Hacienda and the land on which Chichen Itza was located. Although Thompson often complained of Breton's presence, Breton

managed to document several murals at the site. Frederick Ward Putnam of the Peabody Museum became familiar with her work in 1902 and was so impressed by her sketches that he commissioned Breton to make color reproductions of the known murals at Chichen Itza during this period, while continuing to work for Maudslay (McVicker 2000:62). Breton's work included sketches in field notebooks and full-scale drawings traced on the spot onto tracing paper that were transferred onto linen, and reduced to one-quarter scale (Miller 1977:200).

Coinciding with the work of Breton, Eduard Seler visited Chichen Itza in 1902-1903, 1906-1907, and 1911. Seler wrote numerous articles on the site, including "Die Ruinen von Chich'en Itzá in Yucatán" published in 1908, in which he described the murals in the Upper Temple of the Jaguars. His description of the murals was based on the copies of Adela Breton and Teobert Maler's works given to him by the artists. In addition, Seler had visited the site and "investigated these frescoes in more detail" and was able to produce some tracings, in particular the center east panel (Seler 1998:109). Unfortunately, only a few images found in the murals rather than the overall composition of the murals were published by Seler in the early 1900s, while Breton's original reproductions of the murals from the Upper Temple of the Jaguars were forgotten for almost a half a century.

Around the turn of the century, Edward Thompson explored many areas at the site but focused primarily on the dredging of the Sacred Cenote for artifacts to be sent to Harvard's Peabody Museum. In approximately 1913, Edward Thompson was contracted by the American Museum of Natural History to make molds for a full-sized model of the

"Temple of the Jaguars to be erected as an architectural feature of the Columbus Avenue entrance to the Museum." In conjunction with this commission, Thompson wrote an article for the Museum's Journal describing the structure and his project. The following is a description of the murals in approximately 1913:

> The inner chamber of the structure above, that of the temple proper, has its walls as yet almost intact and they were once completely covered with mural paintings depicting domestic scenes, early migrations, and war forays. Nature however has passed her erasing hands over large portions of the smooth wall surfaces and vandal man has proved more pitiless than Nature in defacing the works of the ancient artists, yet even so, enough remains to make this chamber the repository of what is probably the finest examples of this class of mural paintings yet left to us for study and comparison. (Thompson 1913:270)

Between 1915 and the late 1930s, the Carnegie Institution of Washington commissioned large-scale excavation and restoration projects throughout Middle America. Yet, in Chichen Itza, major field-work projects did not begin until January 1, 1924, when the Mexican government granted the Carnegie Institution the "permission to carry on archaeological explorations and excavations, as well as necessary repairs in the ruins of Chichén Itzá" for a period of 10 years (Morley 1925:82; Morris et al. 1931:8). Under the supervision of Sylvanus G. Morley and Alfred Kidder, a comprehensive map of the site's core and its southern section was produced and several principal architectural zones were excavated, consolidated, and rebuilt: El Caracol under the leadership of Karl Ruppert; The Temple of the Warriors, of Earl H. Morris; and Las Monjas, of John S. Bolles. During this period the Carnegie Institution published several important reports on the architecture, art, artifacts, and epigraphy of Chichen Itza, although the emphasis of their work focused on the structures of the site. In 1957, Tozzer published a synthesis of all the data recovered from the site during exploration and excavation between 1924

to1940. In his two-volume work, Tozzer described the art, architecture, and iconography of Chichen Itza and attempted to reconstruct the history of the site. Tozzer (1957:176) described the murals in the Upper Temple of the Jaguars as actual battle scenes, the west wall depicting "a native village being attacked by a band of Toltec led by chieftains associated with feathered serpents representing the possible new cult of Quetzalcoatl." Based on the murals, Tozzer (1957:176) suggested that the wars or raids took place in the Yucatán, with the victors almost always Toltec and the victims Maya.

Simultaneous with the work of the Carnegie Institution, the Instituto Nacional de Antropología e Historia (National Institute of Anthropology and History) of Mexico carried out investigations and partial excavations of the Castillo and the Great Ball Court complex (Ruppert 1952:20; Cohodas 1978:15). The excavation and repair of the Great Ballcourt was under the supervision of Dr. Ignacio Marquina and José Erosa, while Miguel Angel Fernandez carried out the actual explorations and preliminary restoration of the buildings in the Great Ballcourt (Marquina 1928:73, 1994:108), the Castillo, and the platforms of the North Plaza. Fernandez also recorded the reliefs found in the Temple of the Jaguars and the ballcourt (Marquina 1994:108).

According to Willard (1941:210), after Edward Thompson's property was taken over by the Mexican government, Eduardo Martinez oversaw the complete restoration of the site as engineer of construction. Martinez supervised the reconstruction of the Temple of the Jaguars, the Tzompantli, and the stairway of the Castillo (Willard 1941:210).

In 1972, Eric Thompson, the foremost authority on the Maya during this time,

was invited to the City Museum in Bristol, England to view the color reproductions of the murals from Chichen Itza. The reproductions formed part of the bequest of Breton to the museum. This was the first time the entire complement of the seven painted wall panels of the Upper Temple of the Jaguars was known. Two of the seven reproductions were published in black and white illustrations in 1906; however color reproductions were not published until 1977 by Arthur Miller. In 1972, Eric Thompson and Arthur Miller were going to collaborate on a publication of the Breton mural renderings; however, Thompson concluded that he "might not be able to complete a major project" because of his health (Miller 1977b:198). Thompson discussed with Miller that he believed that "military exploits of the 'Putun-Itza' were depicted on the walls of Temple A and that these murals were an important source of information for explaining the role of the Putun during the Terminal Classic in Mesoamerica" (Miller 1977b:198).

Arthur Miller published the images created by Adela Breton in 1977 in an article entitled "'Captains of the Itza': Unpublished Mural Evidence from Chichen Itza" which suggests that the murals document the military leader, "Captain Serpent's," victorious defeat over "Captain Sun Disk." Miller (1977b:218) describes the north and south panels as the main battle scenes, while the east and west panels each represent a preparatory and consequential episode to these battle scenes. He adds, that based on ethnohistoric and archaeological data, one battle may have taken place in Oaxaca, while the other near the Pasion drainage of Guatemala focused particularly on Seibal (Miller 1977b:220). The author notes that the images are indeed historical events most likely documented "by people who were at least a generation removed from the actual participants" (Miller 1977b:219).

After the publication of Miller's article, these murals have been cited extensively. Clemency Coggins and Orrin C. Shane III (1984) published the images of the murals and provided another interpretation of the sequence. According to Coggins and Shane III (1984:157) the murals are historical events of military conquest under the command of the Toltecs, documented and arranged according to the daily cycles of the Sun and the planet Venus.

Coggins's and Miller's publications were the only two dedicated entirely to the description of the murals, while other citations reference the paintings when describing a particular hypothesis. For example, Andrews V and Sabloff (1986:451) agree with Kurjack, Garza T de Gonzalez, and Lucas (1979) that the wall panel depicting a battle in the red hills took place in the "kegelkarst haystack-shaped hills of the Bolonchen district of the Puuc where much of the soil is red," and that the paintings may "record the Itza subjugation of this area." Schele and Freidel (1990:373) add that the kind of warfare in these mural scenes is similar to "the warfare fought with the spearthrower and throwing spear displayed in Tlaloc warfare throughout the Classic period in the southern lowlands". A. Miller (1977b), Coggins (1984), and Jones (1995) see these murals as depicting a specific war event, while Lincoln (1994:165) interprets them as ritual pattern of warfare and not "portraiture or historical specificity." Greene Robertson (1994:205) also sees them "as a theme of ritual warfare, sacrifice, and domination."

The research connected with the murals in the Upper Temple of the Jaguars is more extensive than that of the other murals at Chichen Itza. This is due to the fact that the murals located in the Temple of the Warriors and the Temple of the Chac Mool were not known to archaeologists prior to 1924 when the Carnegie Institution began large-

scale explorations. The excavation of several principal architectural zones that were conducted under the supervision of Sylvanus G. Morley resulted in the recording of mural paintings from Las Monjas, The Temple of the Warriors, and the Temple of the Chac Mool.

2. The Las Monjas Complex

The Las Monjas Complex (or the Nunnery) is located south of the site's center in the central-northern zone. Between 1932 and 1934, Bolles excavated and consolidated the Las Monjas Complex under the direction of Sylvanus G. Morley for the Carnegie Institution of Washington, D.C. In order to explain the elaborate group of structures Bolles, divided the Las Monjas Complex into four components: basal terraces, platforms, basements, and the buildings constructed upon the basal terraces, platforms, or basements (Bolle 1977:31). The Las Monjas Complex is distinguished by the following major architectural units: southeast annex, east wing, la iglesia, east buildings, southeast court, north building, ball court, southeast building, southwest building, northwest building, burial vaults, and the remains of a building west of the main stairs (Bolle 1977 31-45).

During the Las Monjas Complex Project traces of murals were recorded on: paired capstones in the ground-level standing rooms, fragments on the walls and doorways of the East Wing and South Addition to the East Wing facades of the Southeast Court, and two of the Second Story rooms (Bolles 1977:196). The most complete paintings were located in the Second Story Room 17 and Room 22. Prior to the work of the Carnegie Institution, Maudslay's work at the site in the late 1800s provided a brief description of the murals in these two rooms:

> The chambers were all paved with cement, which, in some parts, is still fairly preserved. The walls and roofs have been coated with plaster and painted with batllescenes and other designs; a very few small patches of these paintings still adhere to the walls, and it is just possible to make out figures of warriors 10 to 12 inches high, with shields and lances in their hands. Blue, red, orange, and green were the colors used. (Maudslay 1889-1902:Vol.V:15)

On the west panel of Room 17, fragments of mural painting suggest that the wall was painted from floor to ceiling. With exception to Bolles (1977) nothing has been published of these images and few images remain on the walls.

3. The Temple of the Warriors Complex

The excavation and restoration of the Temple of the Warriors Complex began in February 1925 under the leadership of Earl H. Morris of the Carnegie Institution of Washington (Morris et al. 1931:7). Excavation of the Temple of the Warriors uncovered several walls that had collapsed inward and were deeply buried. Because of their deep interment, the finished surfaces of plaster and colored paint on the walls remained intact, specifically the “areas representing the partition wall across the center of the temple” (Axtell Morris 1931:168). Regrettably, because the walls disarticulated over time, what remained of the murals was a jumble of one to two feet square blocks with traces of the original mural panels. In order to carefully record the individual blocks and their locations, archaeologists divided the two rooms (outer chamber and inner sanctuary) into rectangular areas, bounded either by surrounding columns or lateral walls (Morris et al. 1931:382).

The majority of painted stones were found in the inner sanctuary because they

were more protected from the elements than those from the outer chamber. After recording the painted stones, they were removed from their provenience and stored in an abandoned swimming pool (Axtell Morris 1931:168). The portion of the murals that remained *in situ* was the colored dado band of plain-banded colors along the base of the walls (Morris et al. 1931:383).

Fascinated with the decorated stones, Dr. Morley allowed Ann Axtell Morris to "fiddle with them" (Axtell Morris 1931:169). Beginning with the most decipherable location, Area 31, Axtell Morris traced the design with pencil on transparent paper. She then transferred the image with carbon sheets onto watercolor paper. Using the stone as a model she proceeded to duplicate the painted images in color and finally cut the paper to the original size of the stone. Axtell Morris, with the assistance of Jean Charlot assembled Area 31 into a coherent picture. Finally the image was drawn to scale and Axtell Morris "put in necessary restorations, being very careful to fill in the missing parts with exact duplications of elements found in the same area, so as to not ruin its scientific value by the injection of any purely personal imaginings" (Axtell Morris 1931:175). In the parts where no painted figures were discernable, the artist extended the background of blue sea or red land (Morris et al. 1931:419).

After the painted stones were recorded it is unclear where they were stored and if they were preserved.

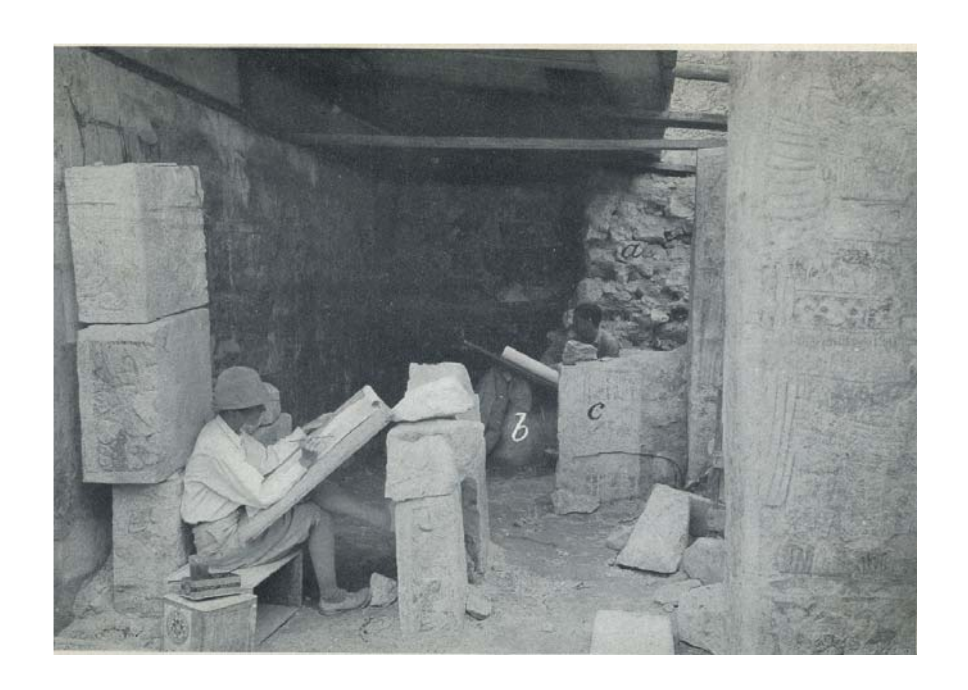


Figure 3 Ann Axtell Morris and Jean Charlot, staff artists for Temple of the Warriors and Temple of the Chac Mool. From Morris (1931:176c).

4. Summary

The general discussion of the murals at Chichen Itza has focused primarily on three issues. First, the murals' depiction of battles in various locales has been used to support the majority of scholarship describing defeat, conquest, and a Mexican presence in the city. Second, the absence of a dominant individual such as a king, suggests that the Classic Maya political system was not practiced by the Terminal Classic at Chichen Itza. Third, debate as to whether the murals in the city depict historical or mythical events. In this essay, I will attempt to move beyond these three issues by examining the entire corpus of wall paintings at Chichen Itza in order to interpret its development and content.

III. General Considerations

1. Definition of Murals

A mural is one technique of painting. That which distinguishes a mural from a portable painting is the fact it is bound to a wall and consequently a component of architecture (Mora et al. 1984:1). Murals are categorized as *a secco* or *fresco*. Most murals are rendered on a surface composed of two layers. The first layer of lime-based plaster is normally coarse and executed to even out the original surface and to sometimes hold in moisture (Mora et al. 1984:1). The second layer is a lime-wash or wash of clay brushed onto the surface. Lime-based plasters generally utilize additional minerals additives, such as *tezontle*, a volcanic quartz, and clay mixed with lime (Magaloni 1995:17). The composition of the plaster base affects the overall quality of a mural as it will dictate the depth, texture, and color of the image.

The *fresco* technique is achieved by painting the design while the surface is still moist, using pigment mixed with water, lime water, milk of lime (Mora et al. 1984:13), or in cases such as central Mesoamerica, a mixture of white clay mixed with mica and haliosite (Magaloni 1994:18). The variation in materials creates different effects in the final image. In all fresco murals the application of a moist pigment mixture onto fresh plaster will cause carbonization of the lime (calcium hydroxide). During the drying stage, the evaporation of water migrates to the surface and passes through the paint layers. While evaporating through the layers, a saturated calcium hydroxide solution reacts with carbon dioxide in the air and forms calcium carbonate. The pigments are

bounded to the superficial carbonate and become fixed into the surface (Mora et al. 1984:12).

The fresco technique is dependent upon the carbonization of lime to bind the pigments; but with the *a secco* technique, the artist adds a medium, such as milk of lime, egg, casein, animal glue, vegetable gums, linseed oil, or poppy-seed oil to the pigments to function as a binder. The artist allows the plaster or whitewash surface to dry before painting the mural. Then the pigment is mixed with a binding medium and applied to the surface. In some cases, as is the case with the wall paintings at Chichen Itza, both techniques, *fresco* and *a secco,* are used on a mural to create different effects (Mora et al. 1984:13).

After the application of the second layer of plaster, a preparatory drawing (sometimes incised) functions as a guide for the artist. The application of pigment to a wet surface requires the artist to work at a steady pace and with minimum brushwork to avoid clouding the paint or weakening adherence to the surface (Mora et al. 1984:16). Historically, several different techniques have been developed to allow the artist more time to execute a painting, and create different results.

For example, in approximately A.D. 500 artists in Teotihuacan were perfecting the quality of their murals and technique by employing the use of volcanic quartz. The addition of volcanic quartz to the first layer distributes itself in the calcium carbonate matrix, creating mechanical resistance on the surface. Volcanic quartz contains minerals that are translucent and semi-crystallized which, in turn, reflect light and create a luminous appearance to the murals (Magaloni 1994:18).

Once the first layer is applied, the Teotihuacan artist would draft a preparatory drawing of the image to determine the relationship between the space and the image. Then, with basalt pestles, a fine mixture of white clay with mica and haliosite would be applied to polish the surface and maintain its humidity to allow the artist sufficient time to paint the image. The use of clays permitted the surfaces to be polished because the particles slide off one another creating uniformity and smoothness to the murals. Upon polishing the surface, the preparatory drawing was executed and outlined in red. After the base color was painted, the rest of the colors were added systematically−yellow, ocher, orange, blue, and green−with a brush and polished with clay to create a completely homogenous effect (Magaloni 1994:19). Unlike the murals in Teotihuacan, murals of the Maya region do not possess solid color fields, rather, the effect tends to be more organic and natural.

In contrast to the Teotihuacanos in Central Mexico, where the climate is drier, the Maya had to develop mural techniques appropriate for a humid environment. When working with plaster in high temperature and humidity, the calcium hydroxide solution does not evaporate and form calcium carbonate because the high temperature maintains the hydroxide in a solid form. The surface lacks cohesive properties, and the pigments fail to bind to the superficial carbonate and fix into the surface. To solve this problem, the Maya found that by adding vegetal gums to the plaster and the pigment, the viscosity of the solution increased, allowing the carbonization process to take place (Magaloni 1994:22). Consequently, despite the tropical temperatures found in the Maya region,

murals have survived because of their durability and have provided scholars with invaluable information about their culture.

2. Evidence of Murals in the Maya Archaeological Record

At the time of the Spanish Conquest, at least 31 languages and dialects were spoken in the Maya world. The Maya territory encompassed a vast area of Mesoamerica that included the current political regions of Mexico (Chiapas, Campeche, Quintana Roo, Yucatán, Tabasco), Honduras, El Salvador, Belize, and Guatemala. Scholars divide the Maya territory into three geographic zones: the southern territory or Highlands of Chiapas and Guatemala; the central territory or Southern Lowlands in Peten, eastern Chiapas and Tabasco, the northern region of Honduras, Belize, and southern Campeche and Quintana Roo; and the northern area or Northern Lowlands in the central and northern Yucatán Peninsula.

Cultural material recovered from archaeological sites with distinct Maya attributes appeared in approximately 1000 BC in the mountainous regions of Guatemala and the Lowlands of Guatemala and Belize (Clark et al. 2000:442). During the Middle Preclassic (ca. 600-300 BC) period, monumental architecture and carved stone slabs (stelae) appeared in the Maya area, at the sites of Nakbe, Tintal, and Pedernal in the Southern Lowlands (Clark et al. 2000:467). The primary art themes on the stelae were of males in royal or divine costumes (Clark et al. 2000:467).

However, during the Late Preclassic period (ca. 300 BC to A.D. 250) evidence of carved stelae diminished and large-scale architecture and art emphasizing religious

concepts appeared throughout Lowland Maya centers, particularly in the Mirador Basin. Decorating the pyramids were enormous stucco facades, several meters high, depicting masks of deities (Clark et al. 2000:469). At this time, exteriors of buildings were covered with a monochrome layer of red pigment, although at the sites of Lamanai and Mirador, two or more colors were applied to the surface of building facades (Staines Licero 1999:212). Pigments were also applied to architectural sculptures in Uaxactun, el Mirador, and Cerros. However, evidence of mural paintings is fragmentary until the end of the Late Preclassic period.

By A.D. 100 complete wall paintings appear in the archaeological record. Discovered in 2001, partially uncovered wall paintings from the previously unknown site of San Bartolo, Guatemala, revealed that the color palette and the art of painting were far more sophisticated than originally known from this period. Similar to other works of monumental art from the Late Preclassic period, the scenes focus on religious or mythological concepts. According to Karl Taube, the content of the San Bartolo mural reflects part of a mythological story in which the maize god travels through the underworld and is eventually resurrected (Parsell 2002). This is the first known depiction of this particular myth in narrative form (Taube in Parsell 2002).

In addition to the San Bartolo murals, a mural was recovered in Burial 166 at the site of Tikal in Guatemala. In a small vaulted tomb with ceramics from the Cauac ceramic complex (A.D. 1-150), masonry walls were crudely plastered and painted with red cinnabar and six black-line figures (Harrison 1999:58). The painted individuals are both sitting and standing, dressed in complex headdresses, masks, jewelry, with some

hieroglyphics near them. From the Early Classic period at Tikal, a small temple, known as Structure 5D, Sub 10-1a, contained Burial 167 which was decorated with polychrome frescoes in hues of black, red, yellow, and pink over a cream covered plaster (Harrison 1999:59). Four individuals, measuring approximately 89 centimeters in height, are adorned with bracelets, ear ornaments, headdresses, and long nosed masks with big volutes (Lombardo de Ruiz 1987:59). Also from the Early Classic period at Tikal, in Structure 5D-33 of the North Acropolis, in Burial 48 was a white wall with black glyphs painted on it. Located on the wall was the Long Count date corresponding to A.D. 457 (Staines Licero 1999:213).

From this same period are similar tombs with murals from Rio Azul in Northeast Guatemala. Eleven painted tombs dating between ca. A.D. 440 and 520 were found. The subject matter of six of the tombs is a combination of hieroglyphic and iconographic material, four are strictly hieroglyphic, and one is exclusively iconographic (Adams 1999:80). The most elaborate murals are from Tomb 1. The paintings contain hieroglyphs describing significant dates. In addition, iconographic images such as masks, tie the ruler of Rio Azul to the contemporary ruler of Tikal, Jasaw Chan K'awil. A total of nine panels with hieroglyphs, masks, and symbols of the underworld, such as water, serpents, jade, and flood encase the entire tomb (Adams 1999:81). The subject matter and style of the other murals is similar to that of Tomb 1, with the exception of Tomb 9, which contains no evidence of hieroglyphs but does present geometric designs.

In 1937, near Tikal, at the site of Uaxactun, the Carnegie Institution found a mural from the end of the Early Classic period (A.D. 450-550). Unfortunately, the mural was destroyed, but, prior to its destruction, Antonio Tejeda produced a detailed color reproduction. The fresco was painted in black, red, orange, yellow, and gray (Morley 1946:414). Divided into two horizontal bands, the paintings depict scenes of royalty engaged in distinct and independent events (Staines Licero 1999:217). In total, twenty-six human figures are represented and accompanied by hieroglyphic texts.

From the Yucatán Peninsula the earliest mural paintings (A.D. 300-600) are located in Xelhá, Quintana Roo, in Structure 86, Templo de los Pájaros (Lombardo de Ruíz 1987:60). The two mural panels cover the entire width and length of the wall. The paintings depict various species of birds, a large anthropomorphic figure, hieroglyphs, and several stylistic designs (Staines Licero 1999:216). The anthropomorphic figure is represented from the chest up to the face. The figure wears a large headdress that appears to be a partial mask and is adorned with necklaces and a pectoral. The iconography of the murals is influenced by that of Teotihuacan, the Central Mexican center, which had strong cultural and economic ties to the Maya region during the Classic period. However, the Xelhá murals also share characteristics with those of the Late Classic Maya period such as depicting individuals in full dimension and scale (Lombardo de Ruiz 1987:62).

Murals from the Late Classic period (A.D. 600-900/1000) seem to follow a similar technique to that used in the earlier murals of Uaxactun. The subject matter of murals was not as abstract and became more realistic by depicting rulers and the royal court

engaged in life experiences, such as ritual and ceremonial activities. Likewise, images and hieroglyphs alluding to conquest and civil rivalries became increasingly more representative. Coinciding with these changes in the subject matter in art, the Maya Southern Lowlands experienced an increase in population, city-states, royal courts, and civil warfare.

Celebrated examples of murals from this period are the paintings from Bonampak, Chiapas, in the Southern Lowlands. Dating to approximately A.D. 790, the Bonampak murals cover three vaulted chambers in a small building known as Structure 1 (Miller 1986:23). Separated into three registers, the paintings show members of the royal family, government officials, dancers, musicians, scribes, captives, warriors, and slaves in a sequence of ritual events. Although scholars disagree about the chronological order of these events, it appears that the events begin in Room 1, flow to Room 2, and end in Room 3. The realistic images are painted in a diverse palette of vivid colors. Of all the murals in Mesoamerica, the Bonampak murals have the most extensive documentation. Other evidence of mural paintings from the Usumacinta region in the Maya Lowlands is found at the sites of Yaxchilan and Palenque. At both of these sites few images remain intact.

By the end of the Late Classic period, evidence of prolonged drought conditions and incessant warfare coincides with a decline of elite Classic cultural behavior and its depiction in monumental art in the core Maya area (Southern Lowlands). In the northern Yucatán Peninsula several centers grew from fragmented small centers in the Late Classic to major centers in the Terminal Classic. The northern Yucatán's regional

diversity divides the region into three economic/cultural spheres: northwestern, northeastern, and central-eastern Yucatán (Andrews and Robles 1985; Carmean et al. 2004; Cobos Palma 2004).

In the northwest, the Puuc centers' apogee occurred between A.D. 770 and 950 (Carmean et al. 2004:444). Puuc constructions are often elevated structures on tall platforms with rounded corners and stairways lacking balustrades. Decoration covers the upper half of facades which extend upward by way of roofcombs and (flying facades). The main decorative motifs are stone mosaic masks with different degrees of abstraction and geometric designs that in many cases are also derived from living forms of mythological beings (Schmidt 1999:439).

The earliest examples of Puuc-style architecture appear during what Pollock (1980:589) terms Proto-Puuc in A.D. 600-700 at Structure A at Mulchic, Uxmal, Sayil, Oxkintok, and Xcalumkin. Early Puuc follows (A.D. 700-800) and ends with Late or Classic Puuc in 800-900/950, at sites such as Uxmal, Kabah, Oxkintok (Pollock 1980:589; Kowalski 1987:49).

In 1961, three mural paintings dating between A.D. 800-821 (Kowalski 1987:166), were found within Structure A in a chamber 8.4 meters long and 2.2 meters wide at MulChic, located between Uxmal and Kabah. To preserve these paintings, archaeologists transported the murals to the Regional Museum of Anthropology in Mérida, Yucatán, where they are housed today. The three paintings are divided into three horizontal registers: the upper register contains a hieroglyphic text; the middle depicts several human figures engaged in different activities; and the bottom portrays

elements related to death, sacrifice, and the underworld (Staines Licero 1999:220). The overall theme of this mural is militaristic. Two groups are engaged in a battle; others are taken prisoners; a procession of priests prepares to sacrifice prisoners; and the final scene depicts the prisoner's execution (Barrera Rubio 1980:174; Pina Chan 1964:63). According to Kowalski (1991:403), the murals might portray a collaborative campaign with Uxmal to expand control towards the eastern Puuc region.

At the site of Xkichmol a distinctive mural was recorded by Edward H. Thompson in 1886. Located on the north wall of Room 10 is a horizontal band of similar glyphs representing *ahau*. In the same room, an individual stands beside a series of circular designs with a wavy line horizontal band (Barrera Rubio 1978:180). These paintings at Xchimol, and a capstone of a seated god surrounded by glyphs, are all painted in red.

Fragments of wall paintings have also been reported at Ichmac, Campeche, and Chacmultun, Dzulá, Xnucbec, Chacbolay, and Dzibilnocac, Yucatán. In Dzulá, the scenes are divided into three horizontal bands. The murals are of simply dressed people carrying baskets interacting with others and people lined in procession (Barrera Rubio 1978:177). The Chacmultun paintings are of two scenes divided by three horizontal bands (Barrera Rubio 1978:174). Individuals in the lower scene are of warriors carrying decorated spears and standards and some men with trumpets, all of them inactive, except for one throwing a spear (Barrera Rubio 1978:175). The upper scene, the best preserved portion of the mural, is of a military skirmish where prisoners are taken captive. According to Lombardo de Ruiz (1987:69), the representation of the human figure is

similar to individuals depicted in murals from Veracruz during the same period. Barrera Rubio (1978:176), on the other hand, suggests that the style resembles the warriors of Room 2 of the Temple of the Frescoes at Bonampak.

Approximately 100 paintings, dating to the Late Classic period, have been found on capstones, rectangular stones in the center of ceilings in vaulted buildings in the states of Campeche and Yucatán. The majority of the paintings depict the deity K'awiil or God K (Leticia Staines 1999:258), while others depict personages of the hierarchy (Barrera Rubio 1978:182). Representation of gods and individuals were normally accompanied by hieroglyphic writing around the border of the capstones.

In north-central Yucatán, recent excavations at Ek Balam have recovered 23 capstones and two murals. The hieroglyphic mural found on the north wall inside Room 29 of the Acropolis is titled the Mural of 96 Glyphs. The text starts with the date April 7, A.D. 770 and describes the arrival of a king named Chak Jutuuw Chan Ek'. The text describes this king's relation with a second personage in the text as well as his accession (Grube, Lacadena, Martin 2003:II-13). Found in a great number of broken fragments, the mural in Room 22 was carefully restored, revealing a date of October 18, A.D. 783. The text in the mural may refer to a New Year event (Grube, Lacadena, Martin 2003:II-19). With the recent recovery of murals and painted capstones from Ek Balam the number of painted texts exceeds the quantity of carved texts, which is a unique case for the Maya region, demonstrating in all likeliness, the wealth of data probably lost from vulnerable painted surfaces.

The polity of Coba controlled the area of northeastern Yucatán, the city covered an area of approximately 70 square kilometers (Andrews and Robles 1985:66) and developed independently from the Puuc centers in the west. In a building known as El Cuartel, a mural similar in style to those of Bonampak and MulChic was found. The mural no longer exists, but the small section that remained intact was recorded in 1975. This section shows five individuals in procession, wearing robes, headdresses, and carrying objects. The paintings are naturalistic and utilize a rich palette of colors, such as dark, light, and reddish brown, yellow ocher, dark and light-green, and Maya blue (Lombardo de Ruiz 1987:64).

On the Eastern Coast of the Yucatán, at sites such as Tulum, Xelha, and Tancah, monumental art focused on themes of religion and, in turn, may have served a different function, such as public shrines for weary merchants and travelers. The style of the murals is similar to that of the Mixteca-Puebla tradition in Central Mexico. In particular, scholars such as Lothrop (1924:52) suggested that the murals are similar to those of the codices *Peresiano,* or *De Paris* and *Matritense* or *Trocortesiano.* Images are depicted in horizontal registers, or in some cases in rectangular panels posed in various positions, and normally in procession. Scholars (Fernandez 1941:169; Miller 1982:79) have suggested that by splitting the walls into three horizontal registers, the mural represents the prehispanic conception of the world. The upper register leading up to the corbeled vault, represent the celestial realm; the middle register, the world of humans; and the third register, the world of supernatural beings (Fernandez 1941:169; Miller 1982:79). Representations of gods are normally associated with offerings, ceramic vessels, glyphs

or zoomorphs (Lombardo de Ruiz 1987:72). The gods are adorned with headdresses, masks, and sandals and are depicted in profile. The zoomorphs are associated with coyotes, turkeys, fishes, serpents, and perhaps a feathered serpent. The majority of the gods in the murals are associated with agriculture and the fertility of the earth, such as the maize god, Tlaloc, god of rain and Itzamna, the solar god (Fettweis 1987:82). The most dominant colors in the paintings are Maya blue, sienna, light red, yellow, ocher, and various tones of green, orange, and brown (Lombardo de Ruiz 1987:72).

In the Late Postclassic on the Eastern Coast, mural styles changed to a darker and more sober color palette, with two new deities dominating the iconography. The gods are depicted in a more abstract form and move farther away from Classic Maya pictorial traditions and display a major influence from Central Mexico, Oaxaca, and Veracruz (Lombardo de Ruiz 1987:76). The deities described in the murals gradually move from representing agriculture toward trade and commerce.

3. Summary

A mural is a unique work of art because it is an integral part of a building. The placement of public art, such as a three-dimensional sculpture or mural, is a cultural expression within a city's landscape. The expression is intended to speak to a chosen audience, and the message is carefully considered. So for an individual looking at these images a thousand years later how can this expression be interpreted? Fortunately, Mesoamerican civilization, which began in approximately 1500 B.C., maintained a certain level of cultural continuity until the Spanish Conquest in the early 1520s. Mesoamerican

art stresses a universal theme, linking humans with all animate beings–plants, animals, the elements, planets, and stars (Paz 1987:40).

By the Late Preclassic it is evident from the San Bartolo murals in Guatemala and tomb paintings in the Maya Lowlands that the technique of painting was a skill in an advanced stage of development. Unfortunately, it is difficult to trace these stages of development because they are not abundant in the archaeological record as are ceramics and stone sculpture.

Parallels seem to exist between the development of Maya script and mural painting. Glyphs appear in the Uaxactun and San Bartolo wall paintings, and codices have been recovered in excavations dating to the Early Classic in Uaxactún and Altun Ha, Belize. It is apparent that the skills of painting on walls and in codices were correlated. Both follow a similar format—with a deity or important individual in the center and glyphs around the image. Unfortunately, when writing reached its full range of use in the Classic period (A.D. 250-500), traces of murals in the Maya region are scarce. It is difficult to determine why evidence of this art form is not more abundant during this period. Perhaps the lack of murals is due to their vulnerability to the elements or an increased focus of painting in codices.

The Classic art style was realistic, highly detailed, and focused primarily on the individual, in particular the ruler. Art, architecture, and writing became highly specialized and descriptive of Maya elite practices. The most common forms of Classic Maya art recovered at archaeological sites are stone (most likely because of their endurance to the environment) architectural sculptures in the form of lintels, wall panels,

doorjambs, steps, facades, altars, and thrones; monumental free-standing stone sculptures (stelae); paintings and carvings found on portable objects (such as vases, jewelry) made of ceramic, bone, stone, wood, and shell.

By the Late Classic period, a greater sample of wall paintings appears in the Maya region. Painted capstones in Campeche and Yucatán resemble the Codex-type Ceramics from the Maya Late Classic period, the majority of which are from unknown provenance. According to Robicsek (1981:1) the vessels were most likely from Northern Guatemala, specifically near the sites of El Perú, Naranjo, Naj Tunich, and Northeastern Peten.

In the form of plates, bowls, or vases, codex-style vessels contain thin, calligraphic line designs painted upon a cream white colored vessel similar to the codices of the Classic Maya. A band of glyphs often encircles the top of the vessel. In the middle of the vessel, the principal composition of palace ceremonies and mythological images is framed by a solid red rim band often with base stripes of the same color. The thicker red band is normally highlighted by thin single or double black colored lines.

The composition of codex-type ceramic scenes is similar to those painted on capstones with thin, fluid, fine lines; the work hints of an experienced artist or scribe executing the image on to the stone. However, the content is far more elaborate and descriptive in the ceramic scenes than on the capstones.

Although by the end of the Late Classic, the painting medium, particularly murals, increases at archaeological sites and depicts narrative scenes incorporating a greater number of individuals from a diversity of ethnic and social classes. Coinciding

with the increased number of narrative murals and bas-reliefs, evidence of writing drastically declines. Simultaneously, the southern and central Maya Lowlands experience prolonged and severe drought conditions around A.D. 850 (Dahlin 2002:327), increase quantity of elites (i.e., *sajal*) (Houston and Stuart 2001:61), a militarized rural landscape (Demarest 2004:551), and a rise in other centers such as Seibal and Altar de Sacrificios with distinctive iconographic and architectural elements (Tourtellot and Gonzalez 2004:72). During this period, several traditionally dominant centers−Yaxchilan, Piedras Negras, Tikal, Uaxactun, Calakmul, etc., decline in the Maya heartland with rapid growth in the Northern Lowlands, where they also experienced drought conditions (Dahlin 2002:330).

Environmental conditions, militaristic campaigns and an apparent abundance of elites in the Southern Lowlands occured simultaneously in the Northern Lowlands implying a geographical continuation of similar Late Classic events; however, in the north population rapidly increased while in the south it decreased. The preoccupation in monumental art of divine kingship does not exist in all Northern Lowland centers. Rather, narratives in sculpture and painting representing numerous elites and a diversity of individuals in terms of ethnicity and profession suggest a change in traditional Classic Maya social culture. Of all the archaeological sites in the Yucatán, Chichen Itza has the largest sample of mural paintings, revealing the economic and sociopolitical changes in the Maya region during the Terminal Classic and Early Postclassic.

IV. Description of the Chichen Itza Murals

The corpus of murals in Chichen Itza is the largest and diverse in the Maya region. It is apparent that similar to other Mesoamerican centers, painting was a popular medium to communicate in both private and public settings at Chichen Itza. A total of six capstones, 10 narrative murals, three processional murals, two symbolic motif wall panels, and numerous fragments of other murals have been recorded in the city. This chapter will describe the structures where murals were found, the process involved in recording the murals in the early 1900s, and the content of these wall paintings. Interpretations of the mural scenes are provided in the following chapter.

1. Location of the Upper Temple of the Jaguars Murals

The Upper Temple of the Jaguars murals are found in the Great Ballcourt Complex, located west of the Castillo. One of the thirteen known ballcourts at Chichen Itza, this ballcourt is the largest known in Mesoamerica. Overall, the ballcourt measures 166 m by 68 m. Temple structures, Temples B and C, face into the court at the north and south end. Temple B, at the south end of the court, is 30 m long and 3.35 m wide (Breton 1908:193), with six square relief columns and seven doorways creating the northern wall (Maudslay 1889-1902 Vol.V:26). Temple C, at the north end of the court, sits on a foundation between 20 and 30 feet high. The triple entrance of the single-chambered structure is divided by two round relief columns (Breton 1908:187). Detailed reliefs cover the walls, doorjambs, and balustrades of this small temple. The north wall is divided into three registers. The upper register is divided by a horizontal band separating

elaborately detailed images of individuals engaged in various ceremonial acts. The middle register depicts three rows of richly dressed individuals standing in confronting processions.

The ballcourt playing alley, measuring 146 by 36 m lies between two large parallel buildings with low lying benches and vertical walls measuring 83 m in length, and lay at a distance of 36 m apart (Maudslay 1889-1902 Vol.V:26). On the low-lying benches are elaborate reliefs on six panels depicting ballplayers. The scene in each panel is similar, but the size of the team changes between eleven and twelve players, and the costume of each player varies. The players stand in procession, surrourrounded by undulating serpents. All players look towards the center where a player has been decapitated by another member of the opposing team. From the neck of the kneeling decapitated player emerge six serpents and a large sprouting vine with pods that fills the space directly above a large ball with a skull in the center. At the top of the west vertical wall are the remains of three low-lying small structures. Corresponding with the position of the small structures on the west wall, on the opposing side, are two structures on the east wall, but at the south end where the third structure may have once stood is the Temple of the Jaguars.

The Upper Temple of the Jaguars (Temple A) sits above a platform 17 m wide at its base and 10 m high (Marquina 1951:859). The platform protrudes out from the south end of the east wall of the court and is directly above the Lower Temple of the Jaguars (Temple E). Temple E, a one room structure, is divided by two square, low relief sculpted columns at the entrance. Painted low relief sculptures decorate the entire

interior wall surface. The reliefs are divided into five registers, and depict 117 standing figures in confronting processions (Cohodas 1978:48). Above this primary platform is a secondary platform (approximately 1.5 m high) that supports the Upper Temple, which is 11.4 m wide and 8 m high (Cohodas 1978:57) and faces the opposite direction.

At the entrance of the Upper Temple are two enormous carved stone columns in the form of feathered serpents. The temple is 10.2 m in depth with two parallel single corbel vaulted chambers. The vault of the outer chamber collapsed and is exposed to the elements. In the outer chamber, at the entrance of the inner temple, an altar was recorded in the late 1800s and early 1900s. Fifteen (or possibly fourteen), distinct, three-dimensional, atlantean figures held up a table carved with low-relief designs on its upper surface and edges. The design contained at least two figures that seem to be facing each other (Cohodas 1978:61). Only painted remnants, such as the feet and a possible disc surrounding the right standing warrior, were visible when Adela Breton recorded the altar in the early 1900s. The squatting warrior on the left was almost complete, holding weapons in both hands, armor padding on arms and lower legs and adorned with a headdress, pectoral, and ear ornaments. In the late 1800s, Augustus Le Plongeon dug a trench into the temple floor and interred the "the fourteen Atlantean figures to keep them safe from vandal hands" (Thompson 1913:274). Today one of the atlantean figures is in the museum at the site of Chichen Itza. The other atlantean figures are in the permanent collection of the National Museum in Mexico City.

Jambs and pilasters on both the interior and exterior doorways are decorated in low-relief sculpture. The outer doorjambs, located behind the serpent columns, contain

three different panels of warrior figures on each jamb. The two inner doorjambs contain five panels of human figures, with possible name signs on each jamb. Between the inner doorjambs is a sculpted wooden lintel.

In the interior chamber, the vault and walls were covered with seven painted wall panels (Fig.4). The Upper Temple of the Jaguars murals withstood years of exposure to scholarly exploration and tourism. The buiding is now closed to the public and of the seven panels only the south wall remains relatively complete, possibly due to a better enforced roof at this side of the structure. However, in recent years moisture is rapidly seeping through this side and dramatically altering the images with water stains and plaster flaking of the wall.

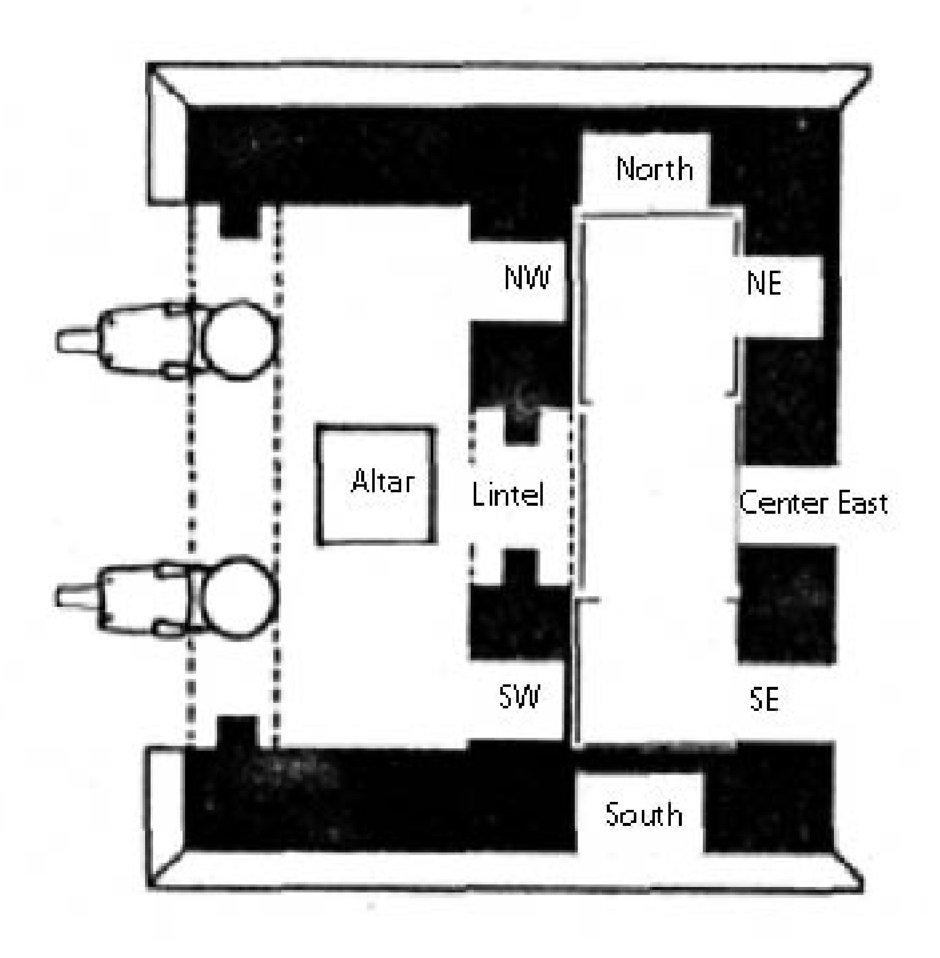


Figure 4 Plan of Upper Temple of the Jaguars, indicating location of murals, lintel, and altar. Redrawn from Schele and Mathews (1986:228).

2. Description of the Upper Temple of Jaguars Murals

The murals in the Upper Temple of the Jaguars have not been thoroughly documented after the work of Adela Breton in the early 1900s, nor have they been conserved or restored. In the spring of 2001, amateur restorers from the University of Mérida, Yucatán, attempted to restore the south wall and a small portion of the west wall with little success. In spring 2005, experienced restorers will attempt to reverse the damage from the 2001 project. The following description of the murals is based on the renderings from Adela Breton's watercolor paintings. At the time Breton copied the murals, approximately 25 percent of the original paintings were lost (Miller 1972b:199).[2]

The paintings are located on the walls of the inner room of the Upper Temple of the Jaguars. Six narrative scenes were painted on the middle register of every wall in the temple; a lower register with a blue background contained partially reclining figures surrounded by vine vegetation; and on the upper register that lead up to the vault were remnants of a painted surface. A double portrait, facing the doorway, divided two scenes on the east wall. The table altar found in the outer chamber was believed to be originally located underneath the double portrait painting because all other atlantean tables at Chichén Itzá have been found in similar locations (Cohodas 1978:61).

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[2] In 2001, approximately 50% of the south wall, 35% of the southwest, and 15% of the southeast panels were partially visible. The areas that remained intact were recorded with multispectral imaging. See diagram in Appendix.

3. Lintel

Above the doorway leading into the interior chamber is a carved wooden lintel of two human figures that appear several times in the mural sequence (Fig. 8). Both figures are seated, but only the figure on the left is discernibly seated on a jaguar throne. The individual on the left wears a feathered headdress and a protruding nose bar, forming a curled snout, along with a four-row beaded chest piece, and a large disc ear ornament. Inside a sun disk a human figure holds a weapon and faces the individual on the right who has a fierce idealized feathered serpent directly above its head. The subject wears a headdress with two large feathers at the end of a double beaded band, a large ear ornament, and nose beads. The figure is heavily padded on the left arm, holding at least five decorated spears in the left. On the right wrist he wears a feathered or fur bracelet with an atlatl in his hand. Between the two facing individuals is a skeletal mask with waterlilies descending from its nose. At the north and south ends of the lintel are serpent heads. Directly above the lintel under the vault area, remnants of a painting were recorded of a figure reclined on her back, with a serpent emerging from her abdomen (Fig. 8). On top of this image is a scene of a procession of at least seven individuals and a sacrificial victim with his chest cut open arched over a stone, with another person holding down his feet. A person accompanied by a feathered serpent against a red background stands above the victim. According to Seler (1998:115) using the renderings given to him by Breton, a priest's assistant stood behind the priest holding "a bundle of spears, a shield with feather hangings, and a spear thrower" perhaps "*spolia opima* of the captive."

4. Mural Panels

The six mural panels are divided into roughly one to three different areas. The upper area contains architectural features suggesting a village. In the middle, are scenes of battles and individuals actively engaged in different activities. In the lower area a row of beehive huts with elite individuals interacting. The mural panel is divided by a turquoise blue thin horizontal band; below this band two seated *pauahtuns* (old gods responsible for holding the sky and earth) recline slightly back, with one hand on the ground and the other holding up the entire upper scene. The *pauahtuns*, surrounded by waterlily plants are sometimes accompanied by another small human figure ascending from a waterlily in the center. All three figures have a waterlily flower projecting from their forehead.

In the mural sequence some panels emphasize one area more than the other, and neither shares an identical format. The following description of each panel briefly describes the scenes. The descriptive order of the murals is counterclockwise beginning at the view from the doorway of the double portrait.

5. Center East

At the center of the east wall (Fig. 5) is a double portrait of two individuals facing each other against a light-blue background. The individual on the right with short, blond hair wears a gold crown with three white feathers projecting from three green cylindrical beads and held together with a blue and red headband. He is adorned with a large green disc ear ornament, a gold disc on his chest, and three spears strapped to the back. Golden

rays and green feathers partially encircle the individual.

On the left stands a figure with short, blond hair or gold helmet with a green-feathered crest, long green feathers projecting from it, and a green mask at the forehead. Decked with a long green nose bar, a green earflare with a bar projecting from it, a green necklace, and two weapons strapped to the back.

Below these two individuals, a thin blue band separates the double portrait from a reclined figure lying on her back. This figure seems identical to the figure depicted in the panel above the lintel; unfortunately the majority of her body is missing. The figure above the lintel (Fig. 8) is dressed from head to toe in a beige garment and evenly spaced green beads covering the body from neck to ankle, and wears a green headband with a hood identical to the garment, a green wrist band, a large, round, green ear flare, and a green belt. From the belt, one, or perhaps two, stylized serpents ascend above the individual with wide gaping mouths and scrolls projecting along their bodies.



Figure 5 Upper Temple of the Jaguars, center east panel. From Coggins (1984:fig.17). Watercolor reconstruction painting by Adela Breton at ¼ scale.

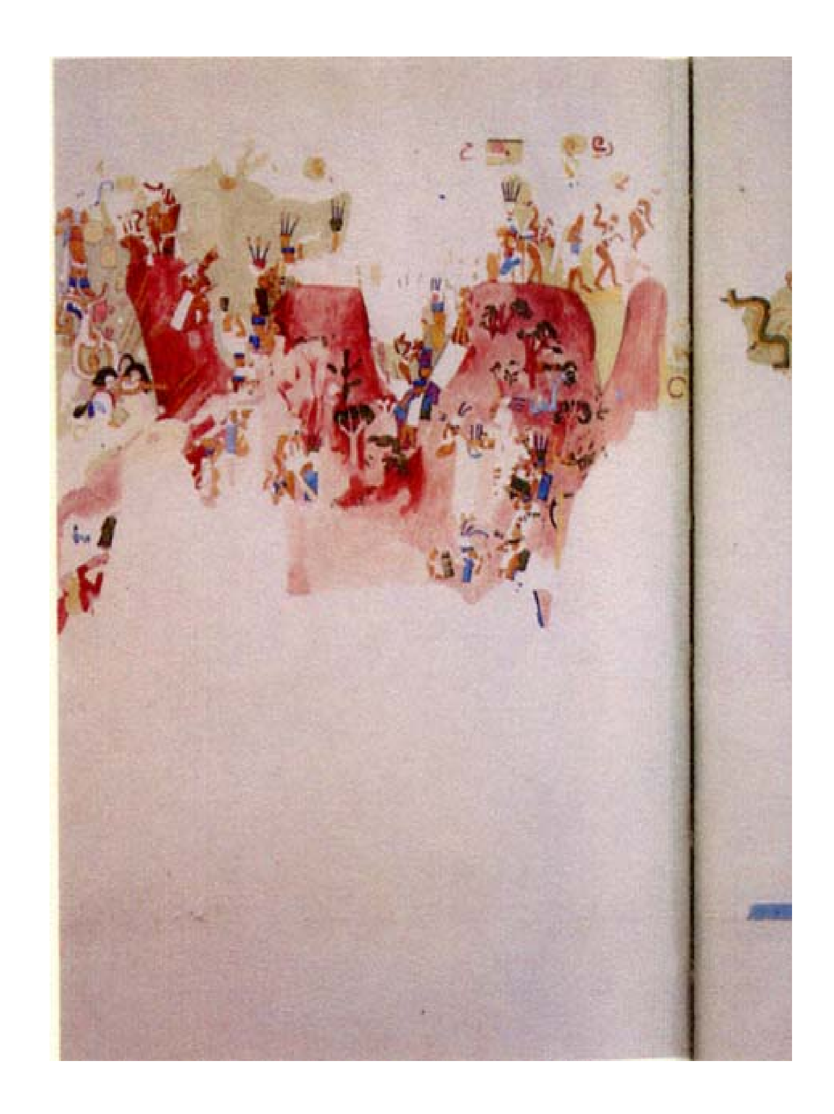


Figure 6 Upper Temple of the Jaguars, northeast panel. From Coggins (1984:fig.17). Watercolor reconstruction painting by Adela Breton at ¼ scale.

6. Northeast Panel

The surviving upper portion of the northeast panel (Fig. 6) contains four red hills with trees. A warrior perched upon the open jaws of a serpent fights against three warriors on top of a hill. Four individuals cross a bridge, while others engage in battle on the hills. The majority of the warriors carry blue rectangular-shaped shields.

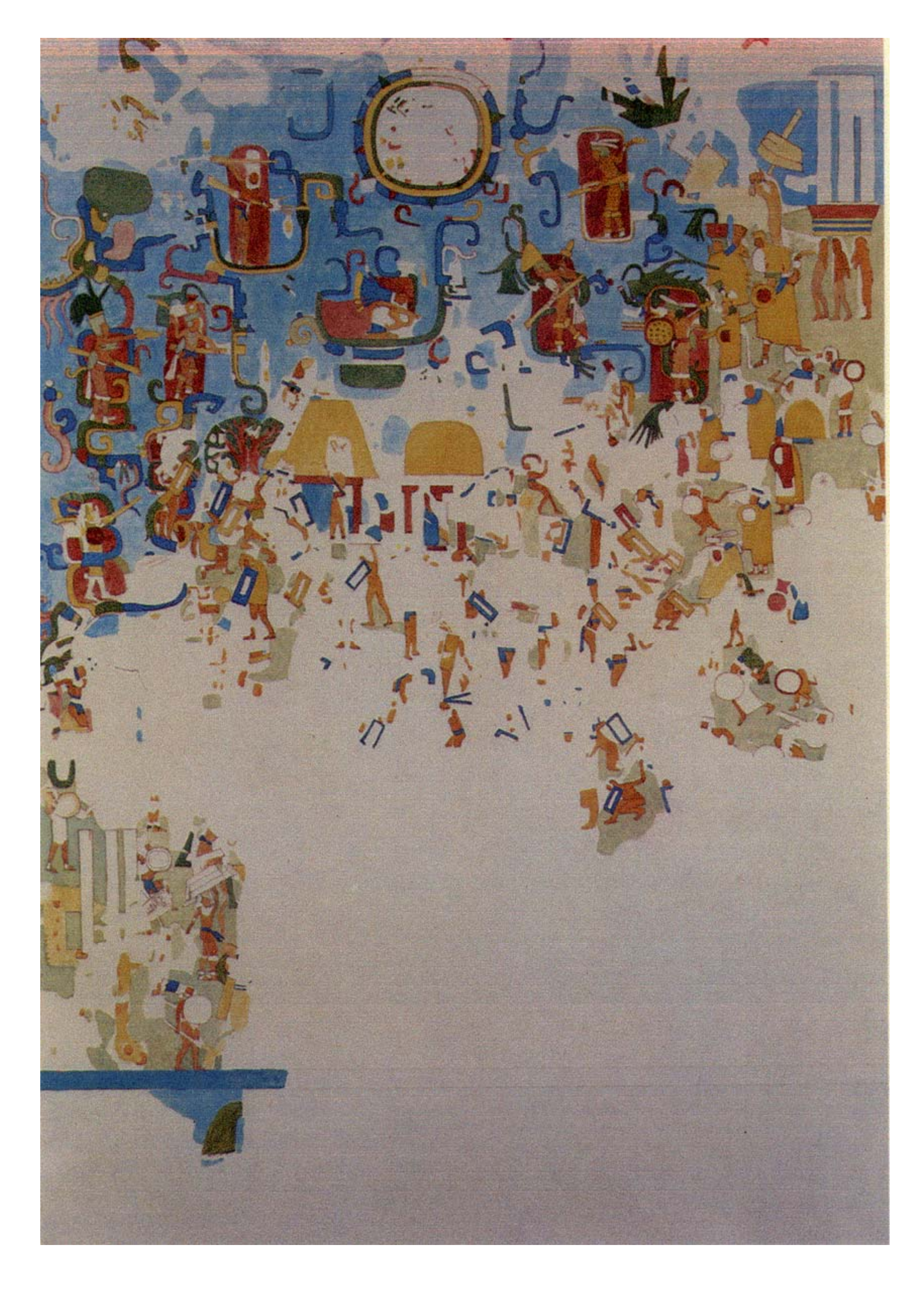


Figure 7 Upper Temple of the Jaguars, north panel. From Coggins (1984:fig.18). Watercolor reconstruction painting by Adela Breton at ¼ scale.

7. North Panel

The upper quarter of this painting (Fig. 7) of a blue sky depicts eight warriors floating on green, stylized serpents against red backgrounds. Centered at the top, in the sky an individual stands inside a sundisc. Below the sky, a group of individuals with blue rectangular shaped shields are fighting against a warrior with a round-shield beside two wood and thatch huts. On the right stand a group of at least nine yellow robed individuals with red, round shields. Approximately half of this panel is destroyed.

8. Northwest Panel

According to Seler (1998:115), it seems that the paintings on the northwest panel (Fig. 8) "were not quite completed, as outlines here are in part missing" and the present painting covered a former one. At the time these murals were recorded in 1907 large sections of this wall were destroyed.

At the top of the panel nine thatch-roofed houses stand behind a red-painted wall. Several blue-painted warriors with green and blue-feathered headdresses attack unarmed individuals within the village. One of the attackers holds a victim by the hair with his left knee pressing into the victim's lower back.

In the upper right side, an individual sits inside a sun disc decorated by four stylized serpents with gaping jaws. Seler (1998:115) notes that this sun disc is supported by a scaffold similar to that of the sundisc in the southwest panel. The individual in the sundisc wears a nose bar, a round ear ornament, thick bands below the knee and around the ankle, a large pectoral, and a turban-like headdress with a bird descending from the

forehead, and several green feathers on the back of his head.

Below the wall, elaborately dressed individuals stand alongside several nude individuals hunched over (perhaps captives or slaves). Near the mouths of several people are speech scrolls. The bottom register contains two reclining *pauahtuns* surrounded by waterlily plants.

9. Southwest Panel

The southwest panel (Fig. 8) was one of the most intact walls at the time it was recorded by Adela Breton and Teobert Maler. The upper panel was one of the three recorded by multispectral imaging in 2001. The following description is based on the watercolor renderings of Breton, the tracings of Teobert Maler that were published by Eduard Seler in the early 1900s, and the multispectral images recorded in 2001.

At the top of the panel a row of warriors holding spears are surrounded by flames. Directly below them, dispersed between several square thatch-roof houses, are people carrying bundles on their backs (Fig.10). A few warriors with blue, round shields stand around the houses, while several warriors with conical headdresses and two long blue feathers line up in front of the village. These warriors (Fig. 11) crouch forward throwing with their right hands an atlatl loaded with a spear. In their left hands are a bundle of spears and a round shield. Attached to the lower back of the majority of the warriors are red and sometimes blue bundles with white spheres at their ends (Fig. 8). The attackers are distinguished by thick, yellow ankle and knee bands, round collars of stone beads at the neck, round, single colored shields, and a disc attached to their lower backs. The

battle is dominated, in terms of quantity of warriors, by the attackers. The warriors of both sides stand in various positions with each dressed distinctly.

Within the scene, two elaborately dressed warriors, perhaps captains, float on green-feathered serpents against red backgrounds, one in the middle left and the other at the upper right, holding jaguar skin shields. The captain on the left wears a disc attached to the lower back, with sandles, and knee and ankle bracelets similar to those of the attackers. The captain on the right wears a thick headband with a down-flying bird at the forehead and green feathers projecting from the top of his head. Behind the captain is another richly dressed captain (Fig. 12) with a round earplug, a ten-stranded necklace and a several stranded arm bracelet. He wears a thick headband with a down-flying bird at his forehead with two broad white feathers projecting from the top. A white serpent with white colored volutes (a sign for clouds) along its body is entwined around the captain's body. Turquoise colored flames dance around the captain's body. The captain holds a bundle of spears in his left hand. In front of the captain on the right is a nude, female warrior (Fig. 13) wearing a strip of thick cloth that wraps under her chin up to the top of her head with one broad white feather projecting from her headband. The warrior throws a spear with her left hand and holds a shield in her right hand. Her right leg is bent upward and heavily padded on the knee.

In the lower center of the scene, dignitaries in groups of two to three are engaged in conversation, as depicted by speaking volutes near their mouths, and seated on stools in front of beehive shaped huts. One of the huts is larger than the other, with a double entrance separated by a post in the middle, connected to a smaller beehive hut. Two

individuals sit before this larger house. At the front of the village, two elaborately dressed individuals sit pointing their index fingers towards a red circular object in front of them. A distinctive feathered serpent looms over the head of each of the individuals. The person on the right wears a headband with a bird descending from the center and a green-feathered crown with a large speaking volute in front of his mouth. Wearing a square shaped ear ornament and a feathered cloak this person sits in front of an individual on a bench whose face is covered by his forearm almost as if in shame. The person on the left wears a turban-like head ornament with two large white feathers and a circular ear ornament. The red backdrop behind the serpent is similar to that of the the captain in the scene above. Between the two individuals, starting from the left, an elaborately dressed individual sits upon a zoomorphic throne, carrying a bundle of spears in the right hand and a stick in the left hand. From his mouth projects a speaking volute. The individual suspended inside a rayed sun disk is held by two vertical pillars with dignitaries sitting in front of two houses. Individuals are distinguished with variations in their headdresses of either blue or green feathers. Similar to the previous panel, below this scene are two reclining *pauahtuns* surrounded by waterlily plants and a smaller person with a waterlily projecting from his forehead.

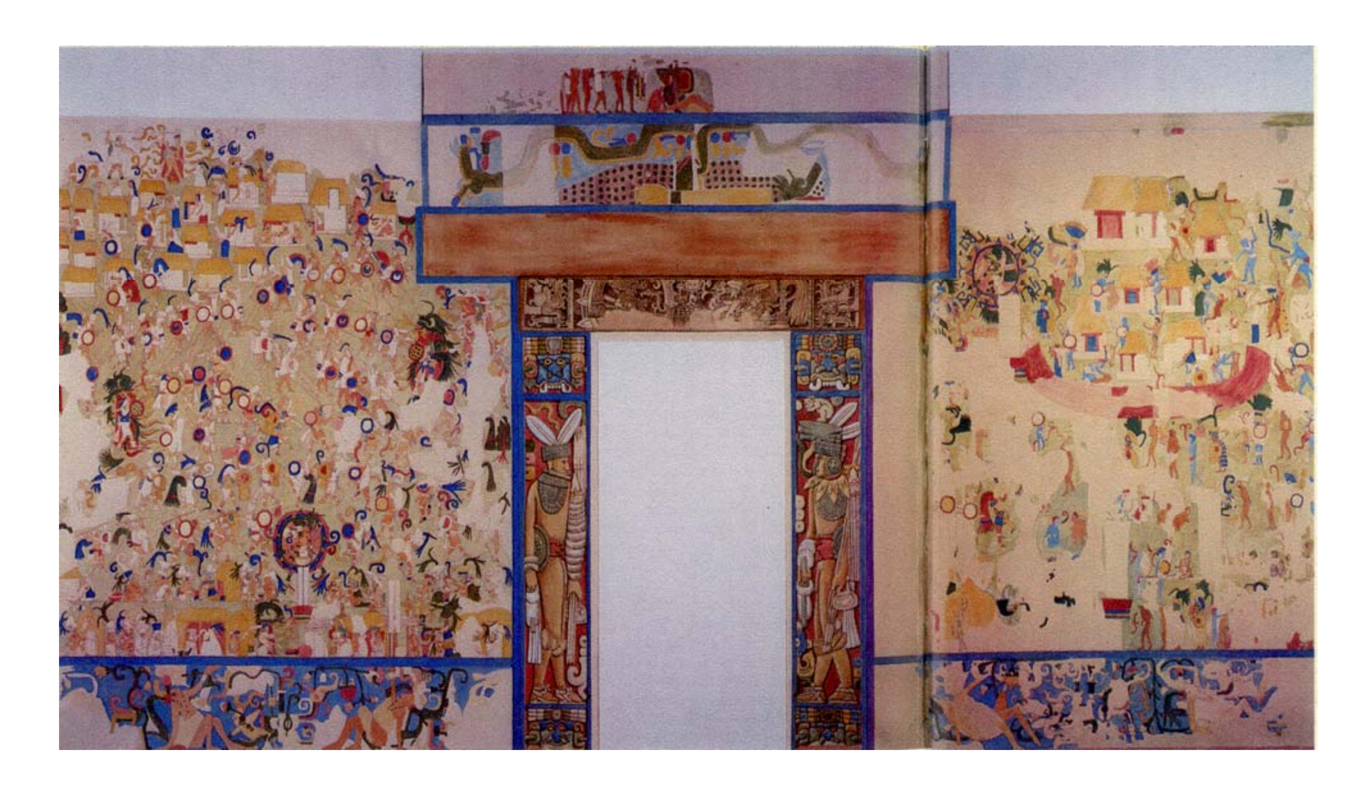


Figure 8 Upper Temple of the Jaguars, west panels. From Coggins (1984:fig.19). Watercolor reconstruction painting by Adela Breton at ¼ scale.



Figure 9 Upper Temple of the Jaguars, upper portion of southwest panel. BYU Archaeological Imaging Laboratory. 2001. Multispectral image.



Figure 10 Upper Temple of the Jaguars, upper portion of southwest panel. BYU Archaeological Imaging Laboratory. 2001. Multispectral image.



Figure 11 Upper Temple of the Jaguars, upper portion of southwest panel. BYU Archaeological Imaging Laboratory. 2001. Multispectral image.

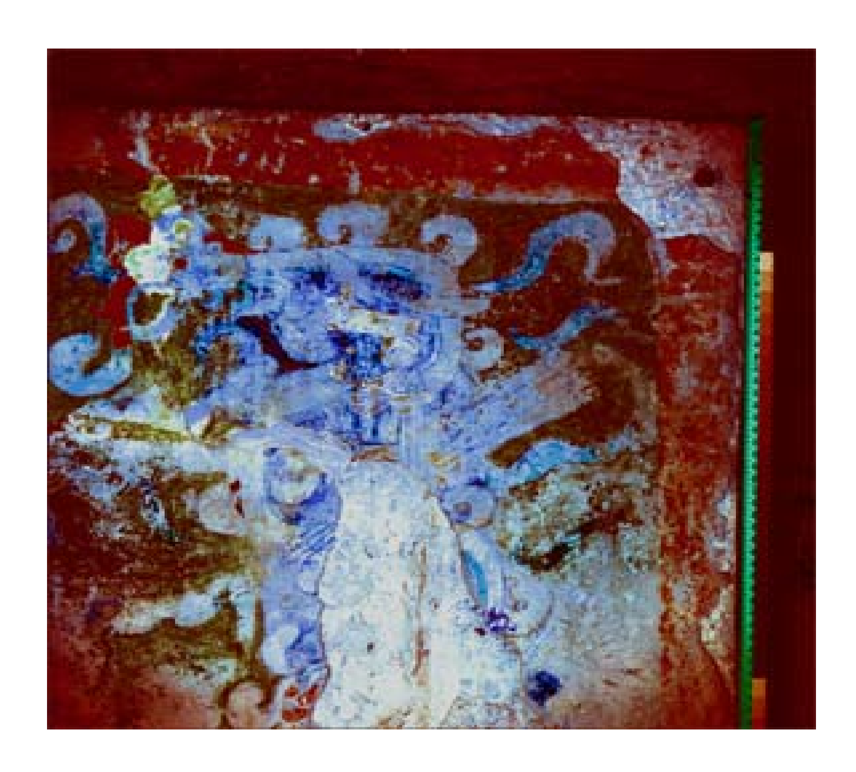


Figure 12 Upper Temple of the Jaguars, upper portion of southwest panel. BYU Archaeological Imaging Laboratory. 2001. Multispectral image.



Figure 13 Upper Temple of the Jaguars, upper portion of southwest panel. BYU Archaeological Imaging Laboratory. 2001. Multispectral image.

10. South Panel

The South Panel (Fig. 14) was almost completely intact at the time it was copied in 1907. Thatch-roofed huts at the top of the scene stand against a blue background. People sit inside the huts, while several warriors stand beside them. Below the village is a scene of combat. Yet unlike the battle scene on the southwest panel, this battle required the use of siege towers and ladders. At the top of each of the three (or perhaps four) towers is a warrior encircled by a green-feathered serpent. Warriors fight on a long set of stairs, though it is not clear where the stairs lead to. In the upper right corner is a warrior inside a sun disc along with two other warriors, each inside a red background and encircled by a red serpent, one of which has green feathers. At the bottom of the scene a row of dignitaries sit on stools engaged in conversation in front of beehive shaped huts. At the center of the dignitaries is an individual encircled by a green-feathered serpent. The bottom register contains two *pauahtuns* surrounded by waterlily plants against a blue background.

11. Southeast Panel

Of the entire mural sequence, with the exception of the double portrait, this panel is the only one that does not depict individuals engaged in combat. Unlike the architectural houses in other scenes, these structures appear to be either masonry houses or temples and are surrounded by trees and animals such as monkeys and birds. At the entrance of the village or city, either two red walls or perhaps two sacbes lead into the town. People engage in household activities and converse in the doorways of structures. Underneath the structures some warriors dressed in uniform with weapons and circular

shields stand and sit, while other people are dressed plainly without weapons. In the bottom register there are traces of waterlily plants against a blue background.



Figure 14 Upper Temple of the Jaguars, south panel. From Coggins (1984:fig.19). Watercolor reproduction painting by Adela Breton at ¼ scale.

12. The Las Monjas Murals

The Las Monjas Complex (or the Nunnery) is located south of the central-northern zone. Between 1932 and 1934, Bolles excavated and reconsolidated the Las Monjas Complex under the direction of Sylvanus G. Morley for the Carnegie Institution of Washington. In order to explain the elaborate group of structures Bolles divided The Las Monjas Complex into four components: basal terraces; platforms; basements; and the buildings built upon the basal terraces, platforms, or basements (Bolles 1977:31). The Las Monjas Complex is distinguished by the following major architectural units: southeast annex; east wing; La Iglesia; east buildings; southeast court; north building; ball court; southeast building; southwest building; northwest building; burial vaults; and the remains of a building west of the main stairs (Bolles 1977 31-45).

During the Las Monjas Complex Project traces of murals were recorded on: paired capstones in the ground-level standing rooms, fragments on the walls and doorways of the East Wing and South Addition to the East Wing facades of the Southeast Court, and two of the Second Story rooms (Bolles 1977:196). The most complete paintings were located in the Second Story Rooms 17 and 22.

Prior to the work of the Carnegie Institution, Maudslay's work at the site in the late 1800s provided a brief description of the murals in these two rooms:

> The chambers were all paved with cement, which, in some parts, is still fairly preserved. The walls and roofs have been coated with plaster and painted with batllescenes and other designs; a very few small patches of these paintings still adhere to the walls, and it is just possible to make out figures of warriors 10 to 12 inches high, with shields and lances in their hands. Blue, red, orange, and green were the colors used. (Maudslay 1889-1902:Vol.V:15)

On the west panel of Room 17, fragments of mural painting suggest the wall was

painted from floor to ceiling. Little data and few published images were found of these murals, the following description of the remaining fragments is of Bolles:

> Below the spring line of the vault, there were two rows of figures and the head of a figure which apparently belonged to a third row. There were four figures in the upper row, and two in the lower. Traces of other figures could be seen in each row. The background for this scene was green and deep blue, and the red-yellow figures were outlined in black. A narrow black line was used to define the background areas of green and blue . . . The figures were all facing north; the two lower row and northern upper row figures held dull-red trumpetlike objects to their mouths . . . They tapered from the mouth out, and had a flare at the outer end. Two hands were needed to hold them to the mouth-the left hand next to the mouth, and the right along the instrument. One figure in the upper row held a stick in his right hand as though beating a drum. Each figure wore a white headdress with two or three forward-projecting white feathers. Each wore white, round earplugs; their black hair seemed to hang down forward and back of the earplugs in long braids. Each figure wore only a breechcloth, was barefooted, and stood with his left foot forward . . . Beneath each row of figures was a roughly horizontal line. A number of red, yellow, and green scrolls, and several pufflike red splotches occupied a considerable section of the background. (Bolles 1977:197)

According to Bolles (1977:197), with the exception of these mural fragments, the rest of the room was practically devoid of painted images; however, traces of paint suggested images of trees and other human figures.

In Room 22, there were several small fragments of frescoes containing figures, buildings, decorative bands, and bordered panels. The most significant images found in the room were of an attack scene and a sacrificial scene. The sacrificial scene between the center and west doors on the south-vault soffit displayed ten or eleven nude figures. Two were bound, while other figures were lying in various positions, with blood spewing from their chests (1977:208). A possible platform stood between the nude figures and three other individuals standing and sitting in different positions.

The attack scene (Figs. 15-17) on the east end of the north-vault soffit, was the largest area conserved in the Las Monjas complex. In this scene, a town or city with masonry structures surrounded by a possible wall of banners, is besieged by several warriors, some throwing torches at the structures. Other warriors stand behind a red wall with round shields and spears, while other individuals sit in front of the wall. Where the red wall terminates a group of similarly dressed individuals stand in a file, facing east, with backs against the structures; unfortunately only their torsos and heads were visible. Each figure, gazing towards the individual on the right, wears a tilted headdress of a wild boar head held in place by a strap that tied under the chin with a bow. Above these individuals float red stylized volutes or red flames. The individual on the right wears a green serpent mask and is suspended from the platform by a brown strap wrapped around his waist. He is looking down and holds an unidentifiable object in his hand. Standing above the image on the platform are five people dressed in mid-thigh length white tunics. Adjacent to them, a warrior stands upon a structure throwing long torches at other structures. Near this warrior a five-branch tree and a henequen-like plant stand below another warrior with an elaborate headdress (Bolles 1977:215). In front of his face was a double, bifurcating scroll. Throughout the rest of the structure many fragments of images were found on several areas of the walls but the scene as a whole was not decipherable.



Figure 15 Las Monjas, Room 22. From Bolles (1977:203). Watercolor reconstruction painting by Jean Charlot.

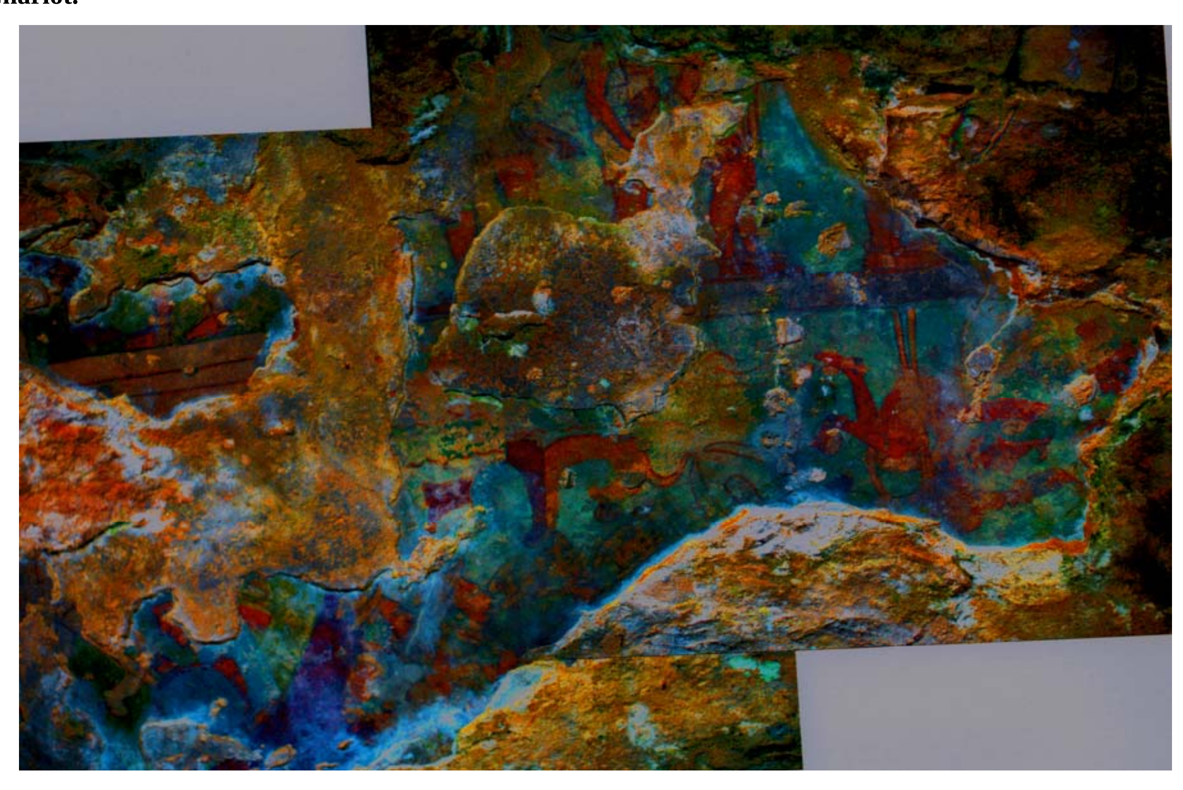
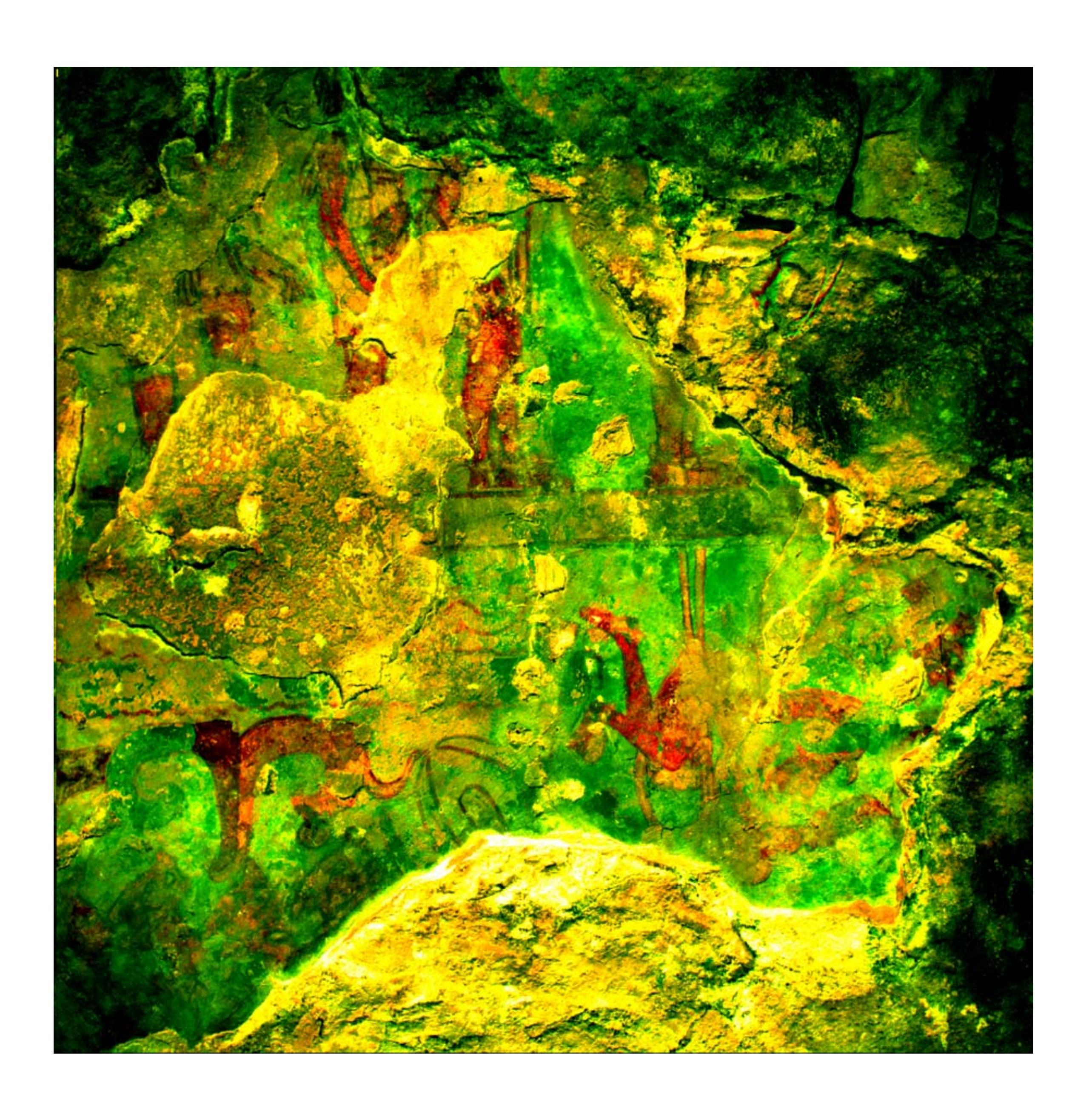


Figure 16 Las Monjas, Room 22. BYU Archaeological Imaging Laboratory. 2001. Multispectral image.

Figure 17 Las Monjas, Room 22. BYU Archaeological Imaging Laboratory. 2001. Multispectral image.



At ground level, in the building identified as the East Wing, the first structure of the Las Monjas Complex, several capstones were painted in the interior. According to Bolles (1977:126) in Rooms 1, 2, 4, 5 and 7 "the central pair of peaked capstones had been plastered and painted with a design and inscription before having been set in place." In Room 2, the south and north painted capstones were removed and copied before being replaced. Regrettably, the capstones in the other rooms were too badly weathered to record (Bolles 1977:127). The two capstones of Room 2 contained a border with a band of glyphs and two narrow lines, with a scene in the center. The north capstone (Fig. 18) was the most complete of the pair, bearing a seated image with what appears to be an elaborate headdress with a floral motif, and a wing connected to the figure's back. The individual's elbow is touching the leg, and the hand is making a flicking gesture. The figure wears a three-stranded beaded bracelet and both the arm and leg are decorated with solid ovals encircled by thin lines. In front of the face is a tube with a double scroll protruding from it. With the exception of the capstones no interior murals were recovered; however, a series of rooms at the South Addition of the East Wing contained fragments of paint on their exterior walls. Bolles (1977:219) noted that the images were similar in scale to those on the interior walls of the second floor rooms.

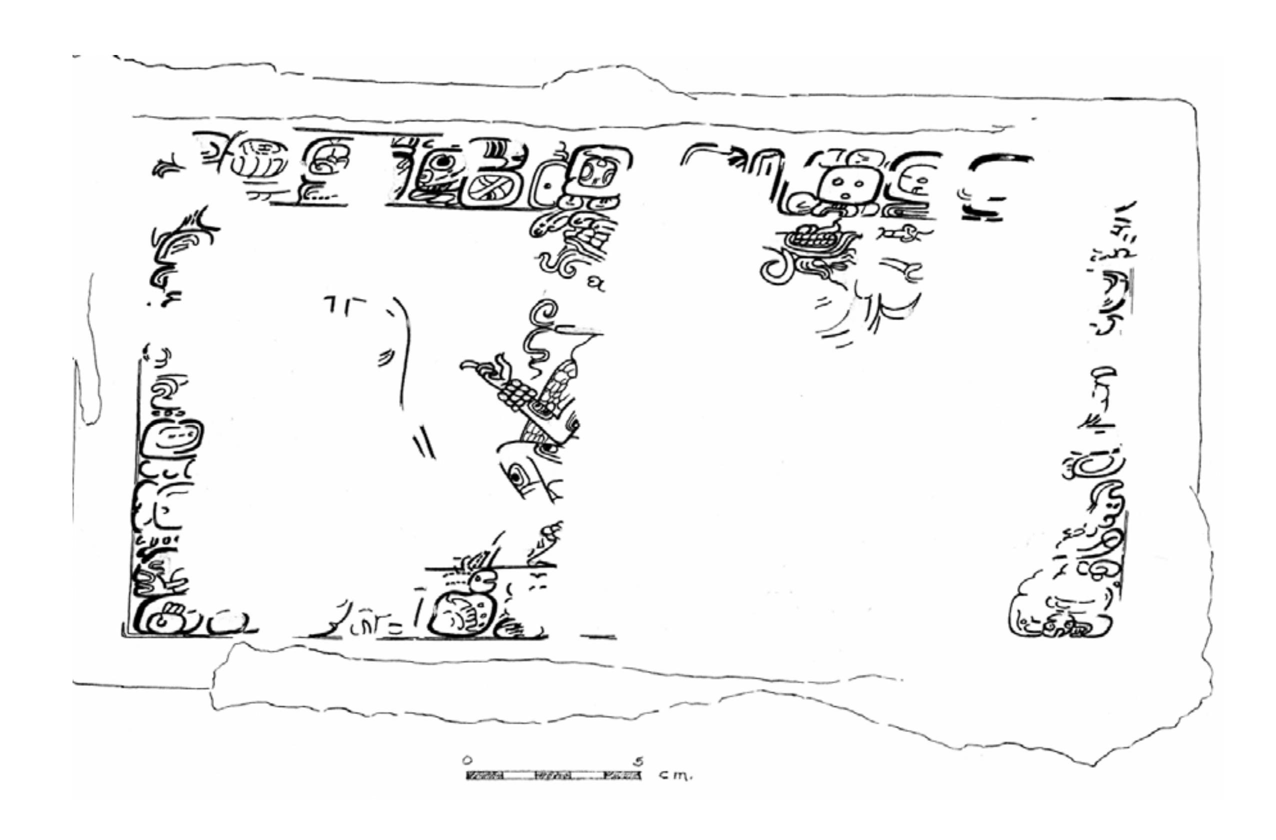


Figure 18 North Capstone, East Wing Room 2, Las Monjas. From Bolles (1977:129)

13. The Temple of the Warriors Murals

The Temple of the Warriors Complex lies on the eastern side of the Great Terrace that supports the group of the plaza of the Castillo and the group of the Thousand Columns. The Temple sits atop a "truncated pyramidal substructure, rising to a height of 11.41 meters" above the approximately 13 m high terrace platform (Morris et al. 1931:13).

At the base and western face of the Temple of the Warriors is the Northwest Colonnade, a rectangular structure 48.07 m in length and 14.82 m in width (Morris et al. 1931:52). The Temple of the Warriors and Northwest Colonnade are considered the Temple of the Warriors Complex because the two structures are connected with a staircase. This staircase rose through the roof vaults of the colonnade into the entrance of the double-chambered temple above (Wren 1984:14). The entrance of the Temple of the Warriors is a tripartite portal divided by two serpent columns that lead into a front chamber with two rows of six columns. The rear chamber or sanctuary has two rows of four columns. Against the center of the east wall is an Atlantean altar supported by nineteen Atlantean figures and nine stone posts (Morris et al. 1931:13).

The restoration and excavation of the Temple of the Warriors Complex began in February 1925 under the leadership of Earl H. Morris of the Carnegie Institution of Washington (Morris et al. 1931:7). Excavation of the Temple of the Warriors uncovered several walls that had collapsed inward and were deeply buried. Because of their deep interment, the finished surfaces of plaster and colored paint on the walls remained intact. Regrettably, because the walls disarticulated over time what remained of the murals was

a jumble of one to two feet square blocks with traces of the original mural panels. In order to carefully record the individual blocks and their locations, the two rooms (outer chamber and inner sanctuary) were divided into rectangular areas and bounded either by surrounding columns or lateral walls (Morris et al. 1931:382) (Fig.19). The majority of painted stones were found in the inner sanctuary, specifically the "areas representing the partition wall across the center of the temple" (Axtell Morris 1931:168). Beginning with the most decipherable location, Area 31, Axtell Morris traced the design with pencil on transparent paper. She then transferred the image with carbon sheets onto watercolor paper. Using the stone as a model she proceeded to duplicate the painted images in color and finally cut the paper to the original size of the stone. Axtell Morris, with the assistance of Jean Charlot assembled Area 31 into a coherent picture.

After recording the painted stones, they were removed from their original context and stored in an abandoned swimming pool (Axtell Morris 1931:168). The portion of the murals that remained *in situ* was the colored dado band of plain-banded colors along the base of the walls (Morris et al. 1931:383).

14. Inner Sancturary-Area 31

The Area 31 mural section (Fig. 20) was located a short distance from the doorway of the Inner Sanctuary, and measured 3.81 m long, 2.34 m high and approximately nine m2. Of the 78 stones (average 28 by 40 cm) that could fit into this space, 58 were recovered and incorporated into the mural assemblage (Morris et al. 1931:418). Ann Axtell Morris and Jean Charlot (1931:418) provide an extensive

description explaining the restoration and depiction of various elements that were and were not entirely present in the mural. The addition of elements not found on the stones such as some areas of background or the completion of a tree were justified by the artists based on comparison of similar scenes in the temple and presented in a a watercolor reproduction. The final reproduction, entitled the Sea Coast Village (Morris et al. 1931, Vol.II:Plate 159), has been presented in two forms: the first depicting "the plot of stones and patterns thereon which were assembled and partially restored to make plate 159" in black and white; the second image is a watercolor representation of the mural with additional images added by the artist, Ann Axtell Morris. Plate 159 provides detailed drawings of the visible images recovered on each stone while at the same time enable the reader to visualize the logic of Morris and Charlot's reproductions. Careful observation of these drawings and the watercolor reproduction additions are convincing but at the same time considered when interpreting the scenes.

The mural panel depicts scenes of a sea coast. The lower one third of the mural is of the sea with a blue background and undulating black lines suggesting ripples in the water. Three canoes with an oarsman at the head of each are spaced equidistant in the water and carry one to two men holding round shields and weapons. Marine life such as fish, snails, crabs and a turtle surround the canoes. A village with a red background dominates more than half of the mural with several thatched roof huts and trees interspersed between them. Some figures walk with bundles suspend from a tumpline. One man walks with the aid of a stick; a woman kneels in front of a vessel cooking on a hearth; and two individuals, one more elaborately adorned than the other are seated at the

entrance of a flat roofed structure decorated with plumed serpents and a plumed serpent looming above the structure. Several fish lie on the ground and in a basket in front of the more complex structure. A white heron flies over the center hut that has a basket of fish in the doorway.

After the restoration of Area 31 Morris and Charlot continued to reassemble and document the existing decorated stones found during excavation. With the exception of Areas 15 and 16, the majority of the areas did not yield such complete results as that of Area 31. For the most part, the images were mere fragments of the original design. However the various sections provided insight into the iconographic themes that once decorated the walls inside the Temple of the Warriors.

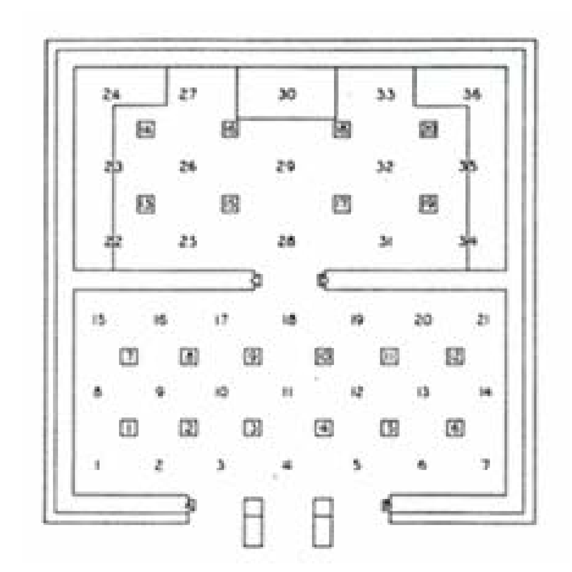


Figure 19 Plan of Temple of the Warriors, Numbers indicate areas where mural fragments were found. From Morris et al. (1935:Fig.272)



Figure 20 Temple of the Warriors, Area 31. From Morris (1931:188). Watercolor by Ann Axtell Morris.

15. Inner Sanctuary-West Wall

Stretching from the door to the corner on the west wall face (Morris and Charlot 1931:405) was a mural depicting five rows of priests, warriors, and dignitaries marching in procession. Regrettably, only three figures in the lowest row were found *in situ*. As a result, the sequential order, direction, and possible size (i.e. number of rows) of the procession were not determined by Charlot and Morris. A broad blue frame surrounded the figures with a stylized serpent motif running perpendicular up the northern boundary of the scene (Morris and Charlot 1931:405).

Several other fragmented painted areas in the front chamber and inner sanctuary were described in detail by Morris and Charlot (1931); however, this review of the murals will focus on the most intact wall panels of Chichen Itza.

16. Front Chamber-Areas 15 and 16

The wall section identified as Areas 15 and 16 measured 2.39 m in height and 4.87 m in width. Similar to Area 31, reallocating stones recovered in the excavation began by separating the stones into groups based on their background color-red, green, or blue. After separating the stones they were then assembled through careful consideration of design elements, design dimensions, patterns, and the shape and size of the stone. The illustrations and restoration of the panels were more fully reconstructed than any other frescoes in the temple. Missing elements from the mural were filled in with similar parts (i.e., clothing, anatomy, ornaments) from more complete images in the same area, unless the missing parts were too large, the area remained blank (Morris et al. 1931:387). According to Morris, Charlot, and Morris (1931:387) the quantity of small, detached units were interesting in detail, but limited the value of the scene.

The final reconstruction of Areas 15 and 16 were published in two forms: the first as the "Plot of Stones and Patterns Thereon Which Were Assembled and Partially Restored to Make Plate 139" in black and white; the second image entitled "A Raided Village and Procession of Victors and Captives" is a watercolor representation of the mural with additional images added by the artist, Ann Axtell Morris. As mentioned previously, comparison of these these two illustrations provide convincing evidence of logical interpretations. However, in this particular scene I do not believe the original paintings provide sufficient evidence for the reconstruction of several structures reproduced in the watercolor illustration.

The mural is divided into three backgrounds─blue, red, and green. The blue area, located in the upper left quarter section of the panel, represents a lake, a pond or an estuary. The body of water appears to be enclosed by a "black-and-white rim design" that may have encircled the entire lake. In the upper left corner of the lake stands a flat roofed structure with an individual standing beside it. One or two canoes float in the water, and marine life such as fish, a snail, and a crab are located in several areas of the lake. In the lower right corner stands an anthropomorphic jaguar. At the water's edge, a man carries a bundle strapped to his forehead. In the lower left corner three men hold weapons and shields towards a fallen individual. A green background encircles the lake and flows into the upper right quarter section of the panel. Above the green background is a patch of red where a striped individual sits in the doorway of a thatched roof house, while a black-painted person stands nearby on perhaps a hill. Directly below the hill, the background changes to green, with a person falling down the hill. A striped-painted person kneels on the ground in front of a thatched roof hut, carrying a bundle strapped to his/her forehead. Adjacent to the thatched roof hut two striped warriors stand on top of a flat roofed masonry structure, and two other striped-painted warriors stand at the entrance of the temple. In the upper right a black-painted warrior stands atop a thatched roof hut, while a striped-painted warrior appears to be setting fire to the hut at the doorway. Below the hut, another thatched roof hut with a black-painted warrior stands at the entrance. In the lower, red, background section of the panel a procession of black-painted warriors hold ropes that bind the hands of striped-painted, nude prisoners. In the bottom lower area of the mural, a fierce, feathered serpent looms with his mouth agape.



Figure 21 Temple of the Warriors, Front Chamber, Areas 15 and 16. From Morris (1935:188). Watercolor by Ann Axtell Morris.

17. Front Chamber-Areas 19, 20, 21

These three areas also depict a scene near the water. Portions of this mural were found *in situ*, with the other sections assembled similar to the areas previously mentioned. Unlike Areas 16 and 17, the body of water in this scene was completely enclosed by a white band with broad black lines, similar in design to that of a serpent's body. Rows of thick, wavy lines, distinguish the body of water. Upon the body of water, individuals sit in canoes where a struggle seems to be taking place between black-painted warriors and red-painted captives with long yellow hair. The captives are naked and some are bound, while one individual seems to be floating in the water with a marine

creature preparing to devour his arm. Some of the captives have green beads dispersed through their long blond hair. One canoe filled with shields appears to be sinking. A white stone wall encircles the body of water.

18. Temple of the Warriors Exterior

Extremely fragile frescoes were uncovered at the north side of the Temple on the sloping basal zone. Lamentably, despite the meticulous efforts of the archaeologists, the moment that the thin plastered layer/crust that held the mural in place was removed the painted layer would often "crumble into countless tiny scales" (Morris 1931:119). Freeing less than a square millimeter at a time with dental picks, Ann Morris immediately recorded any traces of the mural before it crumbled to pieces (Morris 1931:120). After five days of removing the plaster crust and recording the mural, the panel measured twenty-six feet long and four feet eight inches wide (Morris 1931:120). The mural panel portrays a procession of animal and human figures of the same height. From the left a human grasps a staff, followed by a shaggy creature, perhaps a bear or coyote, a calavera, an eagle, a figure not decipherable, and finally a huge scorpion (Morris 1931:121).

19. North Colonnade Capstone

A capstone was found in the North Colonnade rubble (Fig.22), Charlot and Morris (1931:430) note the original location was unknown. The stenciled-like appearance of the painted capstone is similar to manuscripts rather than a mural characteristic (Charlot and Morris 1931:431).

A human figure stands on top of a yellow band filling the main panel. Three of the blue marginal bands remain, with all of these bands decorated with a thin red line border. The upper half of the human figure is missing. Based on the lower half of the figure, Morris suggested the individual was a god impersonator type, specifically God B (Morris 1931:432, 453). The torso and legs have a scale-like appearance, but the individual is garbed in the typical Chichen Itza style dress. A thick, green mosaic style belt holds a loincloth, and the individual wears a thick, green collar with a large beaded, green necklace with a large oval shaped pendant, beads and feathers. Green sandles, a thick cuff on the right arm and a four stranded bracelet on the left arm, three-stranded anklets, a geometric shaped band above the calf adorn the individual. There is evidence of an elaborate feathered headdress, and a feathered tail connected to a red beaded belt around the waist.

A similar capstone was found in the group of the Thousand Columns during the "Proyecto Especial" of Chichen Itza that began in 1992. Unfortunately the paint is very faded and difficult to document. But from what could be seen, the style and dress of the individual is almost identical to the capstone from the North Colonnade.

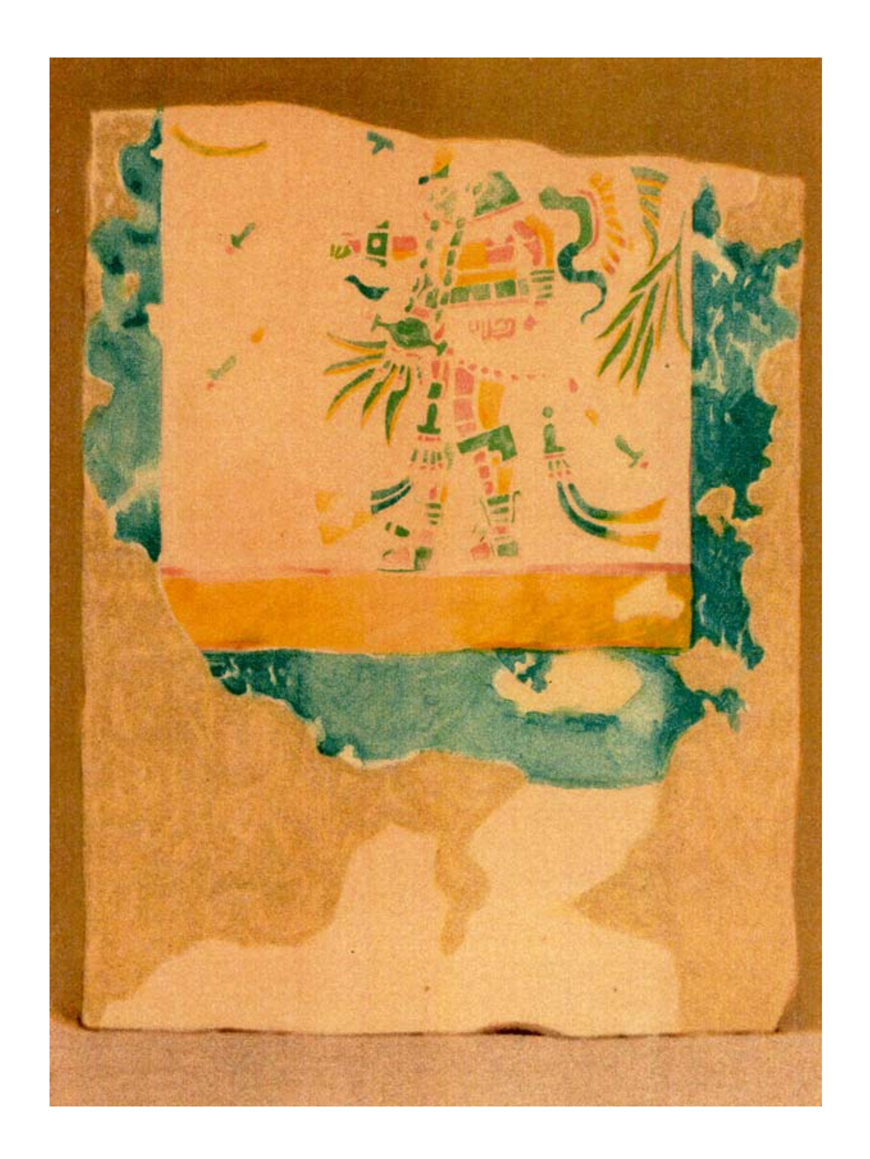


Figure 22 North Colonnade Capstone. From Morris et al. (1935:Plate 163). Watercolor by Jean Charlot.

20. The Temple of the Chac Mool Murals

The Temple of the Chac Mool lies buried within The Temple of the Warriors structure. When uncovered in 1924 the Temple of the Chac Mool was in a good state of preservation "owing to the fact that it was completely encased and enclosed within a solid mass of masonry" (Morris et al. 1931:71). The temple was a two-chambered structure

(outer chamber and Sanctuary) facing west. Similar to the entrance of the Temple of the Warriors, a triple doorway with two massive serpent columns formed the divisions of the portal (Morris et al. 1931:72). When the structure was excavated remains of a floor area measuring 9.42 m from north to south and 4.15 m wide was found in the front or western chamber. The outer chamber was 15.43 m in length and 5.67 m in width (Morris et al. 1931:70). The inner or eastern chamber measured 5.82-6.10 m in width and 9.49 m long (Morris et al. 1931:71). Within the inner chamber were traces of benches that ran along the end and back walls with an altar in the center of the back wall (Morris et al. 1931:73). Morris (1931:74) suggested that the altar in this temple, was probably supported by atlanteans that may have been used to support the altar of the Warriors.

In the interior, all columns, jambs and pilasters were sculpted. At time of excavation, all columns retained original pigment, with the columns in the interior better preserved than those of the exterior.

Morris (1931:75) provided a brief description of the southernmost column:

> So brilliant were the pigments that time seemed for the moment to have lost its immutability. . . every feature of vesture and adornment retained its most minute detail. The decoration upon sandal ties, the mottling of jaguar-skin aprons, the designs in textile mantles, and the ribs on a palm leaf fan, could be observed and distinguished as readily as if one were inspecting a living figure instead of one carved upon stone.

Similar to the columns, paint remained on portions of the walls and “detached stones from the fill proved that walls, vaults and capstones had been covered with paintings” (Morris et al. 1931:75). The murals in both of the chambers began approximately 81 cm above the floor with a black line bordering a 15-cm band of red,

one of yellow and one of blue, each 14 cm in height. The prominent pattern, at 1.24 m from the floor, of four highly conventionalized serpents (Figs.23 and 24), were symmetrically distributed against a background of rich, dark red in each chamber (Morris et al. 1931:75). Two opposing serpent heads faced each other across the doorways and from either side of the altar, leaving the pairs of tails to meet in the center of the end walls of each room. The outline of the serpents were sketched in charcoal upon the white plastered wall and filled with flat washes of various hues and later outlined in black (Morris et al. 1931:364). Remains of the serpent can still be found on the southeast corner wall and reveals at least in this corner a deep rich red color with a polished surface.

During excavation of the Temple of the Chac Mool, several frescoed stones were found, and Morris later determined that these stones formed the missing sections of the north and south benches of the interior structure (Morris 1931:185). Two stylistic differences were noted on the two benches.

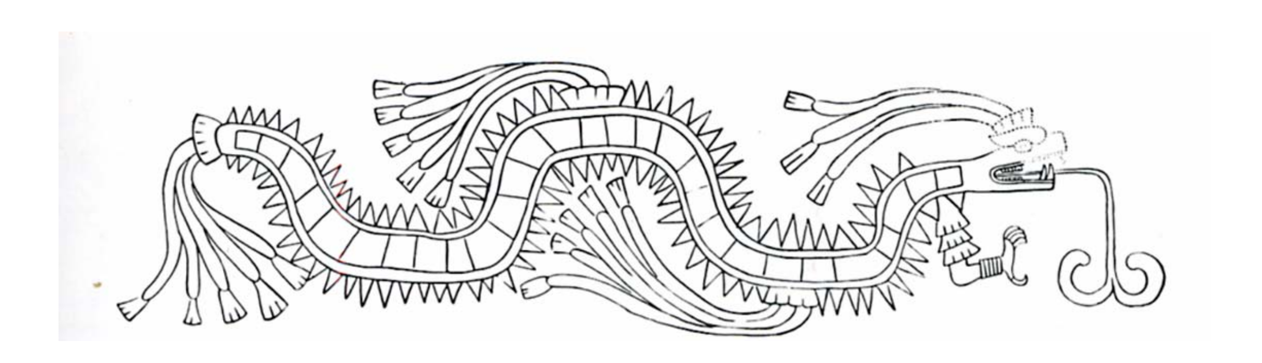


Figure 23 The Temple of the Chac Mool Mural. Drawing of serpent image. From Morris et al. (1935:Fig.259).



Figure 24 The Temple of the Chac Mool Mural, Inner Sanctuary and Outer Chamber. From Morris et al. (1935:Plate 132).

21. Temple of the Chac Mool Benches

The south bench was covered with a thick layer of plaster and smoothed down to an almost glassy surface. It contained a row of fourteen human figures, seated upon white blocks draped with green or red fringe and jaguar skin (Morris et al. 1931:370). The individuals are divided into three separate groups: eight dressed as "god impersonators"; and an old man beside five indistinguishable individuals. Five of the god impersonators are dressed in elaborate attire of feathered headdresses with zoomorphic heads and wide-brimmed hats, mosaic shoulder capes, jaguar skin skirts, mosaic belt adorned with shells, shields and serpent staffs. Of the other three god impersonators, one

is young, one old, and the age of the third cannot be determined because the face is missing. They are dressed with wide-brimmed, plumed hats, green mosaic shoulder capes, long skirts with green beads, and green mosaic belts. Each carries an offering in the right hand. In the third group of individuals, several sections of each individual are missing; for the most part only their feet, legs, and parts of the torso are visible (Morris et al. 1931: 377). The aged person of this group is dressed in a black and white cloak, a cloth headdress, ear pendant, and a bone suspended from his neck (Morris et al. 1931: 377). In the areas between the individuals, scrolls filled in the empty spaces, and signs, perhaps name glyphs, were painted above each of the persons' head.

The images that remained on the north bench, side A, contained a file of four warriors seated upon abstract jaguar style benches. Of the four figures, the individual on the left is the most complete. He holds spears in the left hand and an atlatl in the right hand, and wears an elaborate feathered headdress, a beaded necklace, arm, furry knee and ankle bracelets, and a round shield or mirror strapped to his back. From the torso down, it appears that the other three warriors were dressed in similar fashion. On side B of the north bench are fragments of four warriors similar to those on side A. In the corner of the bench there were painted fragments suggesting two intertwined serpents. On side C of the bench is the image of an old woman wearing a white skirt with a blue belt, carrying a pot in her hand (Morris et al. 1931: 381).

22. Temple of the Big Tables-Substructure

Located northeast of the Great Terrace of the Castillo, adjacent to the Temple of the Warriors, is the Temple of the Big Tables. Explored and restored during the "Proyecto Especial-Chichen Itza," the substructure of this temple revealed a polychrome mural of serpents on the arched ceiling and painted columns of warriors in the interior (Schmidt 1994:23). Due to the sensitive condition of the murals, the walls were not uncovered in their entirety in order to preserve them for future studies.

The portion of the serpent uncovered resembles those found in the Temple of the Chac Mool. The outline of the serpents were sketched in charcoal upon the white plastered wall and filled with flat washes of various hues. The area uncovered reveals appendages of five long blue stems capped by yellow petals projecting outward. Below the stems a portion of yellow scales of triangular rays can be seen projecting from the serpent's body. The background of the serpent is painted in deep red, similar to the Temple of the Chac Mool painting.

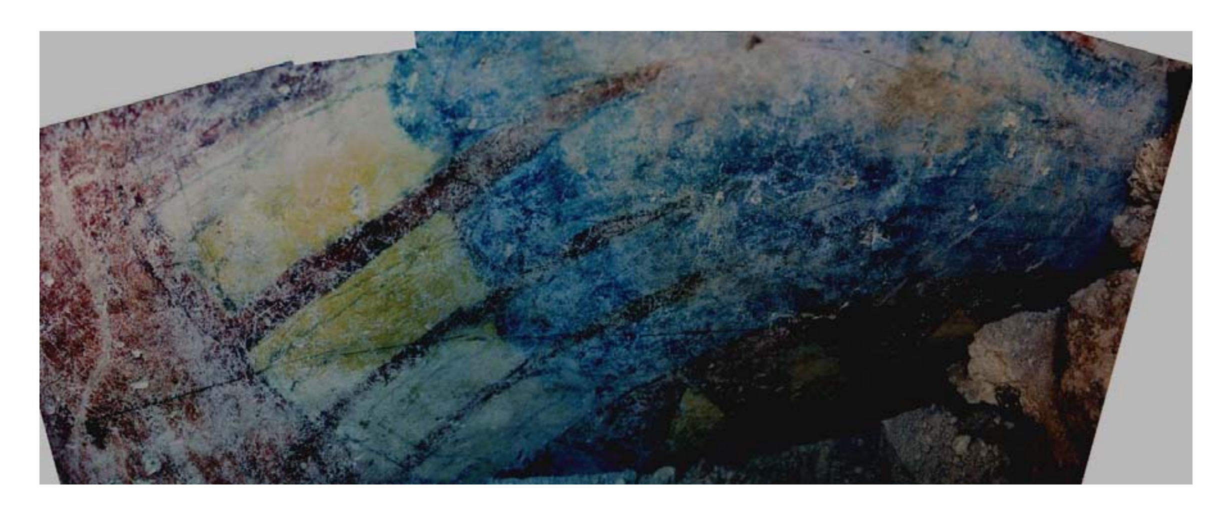


Figure 25 Temple of the Big Table-Substructure Mural. From "Proyecto Especial Chichen Itza".

23. Temple of the Owls Capstone

One and one-half kilometers south of the Castillo in the Main Plaza is an elite residential area known as Chichen Viejo. The zone is approximately three acres and sits atop a terrace with sides of finished stone (Ruppert 1952:158). This area of the city is currently undergoing excavations that began in June of 1998 under the direction of Dr. Peter Schmidt of the National Institute of Anthropology and History in Mexico. Prior to the current excavations, the area had been left untouched since 1926, when George C. Valiant of the Carnegie Institution of Washington undertook preliminary excavations of this zone. In 1913, at the south edge of the terrace, Sylvanus Morley partially cleared the front and west sections of the Temple of the Owls structure and uncovered a painted capstone in the debris (Ruppert 1952:124,158; Von Winning 1985:43). Apparently after discovering the capstone, Morley stored it in Edward Thompson's hacienda (Von Winning 1985:76). In 1926, T.A. Willard (1926:230) noted that the "colors were much faded and the entire picture too faint for the camera". He proceeded to prepare the capstone for photographing by first cleaning the stone with a weak solution of hydrochloric acid and a solution with copal and turpentine to use like varnish on the image (Willard 1926:230). After the colors were "magically restored", Willard photographed the stone in black and white and in color. Not long after this last recording of the images on the capstone, it was destroyed when Thompson's hacienda was burned down by rebellious Indians in 1922 (Von Winning 1985:76).

According to Von Winning (1985:74) there are three different published depictions (Willard 1926:248; Morley and Brainerd 1956:fig.52 and fig.93) of the

complete design on the capstone, none of which share details that match. Yet all three do depict the general theme of the capstone.

In the center of the capstone is a profile of a human figure with an upper arm band, bracelets and garters worn above the calf, and a belt with a two tassels, possibly plumes, on the front and back. The individual has a long, crenelated nose, identified as a deity because of his scroll eye. The deity wears an elaborate feathered headdress that is surrounded by pods and circular objects. In his left hand is a bowl filled with six round objects and four globular bottle-shaped objects. In his right hand is possibly another globular shaped object depending on which drawing is observed. Sun-rays frame a horizontal band of glyphs, and motifs on each side surround the upper half of the deity. The deity stands in the jaws of a coiled feathered serpent. The plumed serpent with large scales and circles on its body is framed within a cartouche that is opened at the top. Also inside the frame are three pods and three circular objects.



Figure 26 Temple of the Owls Capstone. From Morley (1946:fig.52).

24. Capstone from the Temple and Tomb of the Painted Capstone

Prior to 1921, E.H. Thompson excavated this structure between the Casa Redonda and the hacienda buildings, southeast of the Mercado Group. At the west edge of the terrace, remains of a vaulted tomb were uncovered. A painted capstone either from below the floor of the terrace in the tomb or from the temple was recovered by Thompson (Morley 1946:fig. 53; Ruppert 1952:149).

The capstone is of a human figure with an elaborate feathered headdress, multi-

banded wrist and ankle bracelets, a thick belt resembling a yoke (heavy, protective belts worn by ballplayers), skirt and beaded collar. The individual is holding several spears in his left hand and appears to be dropping a decorated throwing stick in his right hand. A single horizontal band of glyphs are above and below the figure.



Figure 27 Capstone from the Temple and Tomb of the Painted Capstone. From Morley (1946:Fig.53).

V. Analysis of Mural Content and Style

1. Introduction

Observation of the style, content, and location of the paintings at Chichen Itza reveals distinctions in each category. In order to describe these categorical differences the murals have been organized in accordance with their content and proposed chronology. Style, in this study concentrates on the overall design of the mural and the variations in visual elements of form such as lines, shapes, values (varied lights and darks), textures, and colors used to create a specific character in the subject matter. Consideration of these elements will seek to explore if the murals at Chichen Itza reveal an artistic character or a dominant form that may have been influenced by regional or local trends during a chronological period. However, I am acknowledging that the scant quantity of murals found at Chichen Itza and during the Terminal to Early Postclassic periods complicate the ability to accurately and thoroughly reconstruct a stylistic timeline recording dominant trends in mural paintings. Nevertheless, styles and subject matter revealed in ceramics, sculpture in the round, reliefs, paintings, and writing at Chichen Itza and other Mesoamerican centers allude to distinctions. The discussion of mural content and style will consider these similarities and distinctions when analyzing the paintings to support a proposed chronology of the Chichen Itza murals in the following chapters.

Furthermore, consideration of the content of mural paintings at Chichen Itza reveals that the emphasis of a conquest hypothesis to describe the historical sequence of

events in the city has overshadowed other interesting details depicted in them. Details found in the subject matter of the paintings allude to the importance of commerce, merchant activity, establishement and legitimization of wealth and power in the city.

2. Stylistic Analysis of Murals

The components of a work of art include the subject, the form, and the content or meaning of a work (Ocvirk et al 1985:5). In this section, the form, or the totality of the murals will be examined. Of particular interest is how the painters of Chichen Itza organized (designed) visual elements of form such as lines, shapes, values (varied lights and darks), textures, and colors to interpret a specific subject to achieve character in the painting (Ocvirk et al 1985:16).

The picture plane of the artist was a prepared plaster surface. On this picture plane charcoal lines were drawn onto a semi-humid or dry surface. The shapes drawn by the artist depict those formed by natural forces and considered naturalistic, representational, or realistic (Ocvirk et al 1985:65). The murals at Chichen Itza are naturalistic, representational, or realistic because the shapes represent trees, fish, animals, buildings and human figures engaged in various activities that are common to everyday experiences. Nevertheless, a realistic representation of a scene does not assume that the image does not describe a mythological context.

The pictorial depth or plane of the murals is voluminous in that the shapes occupy space. However, this space does not seem to reflect strict rules or formulas, but rather are intuitive. In other words, the artists did not follow a system, such as geometric perspective to create the illusion of depth, instead applied their instinct to manipulate

objects into a pictorial image within a shallow spatial field. Other Maya murals such as Bonampak and MulChic use a common ground line or achitectural elements to distinguish scenes and overall do not provide an illusion of depth. However, the paintings at Chichen Itza, specifically the later murals, experiment with depth in the overall composition. Some scenes such as the pauahtunes or the sacrifice scene in the Upper Temple of the Jaguars are separated from others by thick horizontal lines or architectural elements. In the main scenes, however, individuals are not organized along common ground lines or changing scale, rather they are organized in groups, activities, or natural boundaries (sky, body of water), architectural elements (villages, tents), and color. By distinguishing activities and settings with the aid of color an allusion of depth is created, and the scenes near the bottom of the mural (body of water) appear closer than those of the upper portion (sky-horizon) appearing further away from view.

From the evidence that remains, there is no indication of a relationship of one part or detail to another with respect to lightness or darkness (Ocvirk et al 1985:83). In other words, value was not an integral part of these murals. However this does not necessarily mean that the artist was not aware of this relationship.

Also absent in the paintings is a sense of texture, “a surface character of a material that can be experienced through touch, or the illusion of touch” (Ocvirk et al 1985:95). The artist can reproduce texture by using lights, darks, and colors to resemble texture; however, similar to value, the paintings of Chichen Itza do not contain these qualities. Although the murals are painted on flat surfaces, two-dimensional, and lack value and texture, the artists gave three-dimensional space and individualism to the majority of the paintings by manipulating the overall layout, elaboration, and diversity in the

composition.

The subject matter in each painting at Chichen Itza can be grouped into three categories:

1. Supernaturals and serpents

2. Historical events, such as wars and processions, depicted in a narrative form.

3. Aristocratic themes presented in human portraiture.

3. Supernaturals and Serpents

Based primarily on their style and subject matter, the supernaturals category and serpents contains some of the oldest paintings at Chichen Itza. The paintings in this category are the capstones from Las Monjas, the Temple of the Owls, and the murals in the Temple of the Chac Mool and the substructure of the Temple of the Big Tables. The images found in this category are naturalistic but rigid in form, with the exception of the Las Monjas capstones.

The most extensive research on the capstones has been at the site of Ek' Balam, where they have been found *in situ*. The Ek' Balam capstones were placed in position to cover the ceiling of the structure just prior to the dedication of buildings. The inscripting glyphs describe the chamber as being covered, and generally recognize the ruler as being responsible for the dedications. One capstone bears the image of Ukit Kan Le'k', in the guise of the Maize God, and appears to function as a funerary monument. The contemporaneity of the capstones from Chichen Itza and Ek' Balam in the Late Classic period can provide insight to the use of them at Chichen Itza.

The capstones' overall organization and distribution of space share similarities with the "Codex-type Ceramics"from the Maya Late Classic period and codices. Maya

codices were composed of strips of bark paper or animal skins folded like fans, with a thin layer of plaster to create a hard, even surface. Images and writing on the plaster were normally in black and red, with specific passages delineated in vertical or horizontal bands (Taube 1992:1). Codices in the Postclassic "contained complex ritual formulas-linked to astronomical cycles, the seasonal year, and real time-that guided Maya priests and their people" (Lee 1998:208). However, Taube (1992:2) suggests that during the Classic period codices probably recorded detailed religious and historical information. Today, codices are used to understand the Maya pantheon. The few codices that exist from the Maya region (Paris, Dresden, Madrid, and Grolier) derive from the Postclassic Yucatán Peninsula, except the Grolier Codex (Taube 1992:1). Of the four Maya codices, the Dresden provides the most precise data "regarding the attributes and names of Maya gods" (Taube 1992:2). According to Taube (1992:2), "the gods appearing in the Postclassic Yucatec codices are generally of great antiquity and can be traced to the beginnings of the Classic Maya era."

As in any media, variations exist in the capstone paintings of Chichen Itza but of particular interest for this study are the pages in the Paris Codex and Dresden Codex that portray a figure of a deity in the center surrounded by texts. The scenes on the Las Monjas capstone panels are the most similar to this codex type and the Late Classic "Codex-type" ceramic vessels.

The Las Monjas dedicatory capstones are painted with thin fine lines measuring less than a millimeter in width (Bolles 1977:219). The lines flow fluidly and hint of an experienced artist or scribe executing the image onto the stone because of the absence of erroneous traced lines found on later murals. The glyphs encircling the central figure on

the north capstone are drawn in a cursive like style gracefully flowing into each other. Unfortunately, very little remains of the central figure, yet circular designs (oval "god" marks) on the figure's leg and arm, the headdress, the tube with the double scroll, and possible wings have prompted scholars to suggest that this painting is of K'awiil or God K. Attributes associated with K'awiil are: a large crenelated nose; a rectangular element with volutes near the forehead, interpreted as a forehead axe, torch, or cigar; and reptile scales on different parts of the body (Taube 1994:220; Taube 1992:69; Staines Licero 1998:249).

K'awiil symbolizes royal blood, semen, and or maize (de la Garza 1998:243) and an "important god of Classic Maya lineage and rulership" (Taube 1992:79). During the Classic and Late Classic, K'awiil was intimately linked with Maya dynasties in power during ancestral blood-letting rites, and as protector of noble lineage and ancestry (Robicsek 1978:67). Images of K'awiil were commonly found on stelae, lintels, tableros, and ceramic vessels in centers throughout the Maya region such as Palenque, Yaxchilan, and the Puuc zone. At Chichen Itza, representations of K'awiil have been found in elite residential areas such as Las Monjas and Chichen Viejo, where numerous works of art contain elaborately decorated images of power, abundance, and fertility.

In addition to K'awiil imagery, the name K'awiil has been identified in a series of glyphs from Chichen Itza. The glyph collocation for K'awiil also appears next to the name Yax Muluc Kuk and is believed to have been a patronym and/or a royal epithet in the city (Ringle 1994:235). If this figure from the Las Monjas capstones represents K'awiil, it is consistent with the other capstones found in the Yucatán which scholars (Staines Licero 1998:249; Barrera Rubio 1994:179) have also determined represent the

same god.

Similar to the Las Monjas capstones, the capstones in Puuc and Chenes centers, such as Xcalumkin, Ek' Balam (Barrera Rubio 2003:33), and Uxmal represent a continuation of the Classic Maya use of glyphs, art style, and deities. The capstones were not intended to be viewed by a large audience given the size of the images and position, literally at the highest and darkest point of the room. Capstones also overlay tombs and represent the portal art of subterranean or underworld (Christenson 2005: personal communication). The north capstone of Room 2 in the East Wing of the Las Monjas Complex is an earlier example of wall painting from the site. The Monjas architectural complex is associated with the Puuc architectural style and the first floor of this structure where the capstones were found is considered the oldest of the complex. Hieroglyphic lintels from Monjas and other Puuc style structures (the Temple of the Three Lintels, the Akab Dzib, and the Temple of the Hieroglyphic Jambs) feature dates between A.D. 832 and 881 (Kowalski 1999:402), dates in which the Las Monjas capstones were probably created.

In contrast, the capstone from the Temple of the Owls was painted later. A chultun excavated between this temple and Temple of the Monkeys places the Temple of the Owls in the Middle phase of the Kukulkan/Sotuta Complex (Pérez de Heredia Puente 2004:15). Unfortunately, the painted hieroglyphic texts are not clear, but the motifs on the skyband resemble those found on Sotuta vessels (Taube 1992:245). According to Morley (1946:420) the deity resembles images found in Postclassic codices, while Taube (1994:220) suggests that there "appears to be a disintegration" of the deity K'awiil during this period. The central figure is not as square as the Postclassic figures, and the body is

more realistic, fluid and proportional in shape. Similar to many other works of art in Chichen Itza, this capstone reveals a transitional style.

A work of art strikingly similar, although in a different medium, sculpted stone, is a sculpture from the doorway of Structure 4B1 at Sayil, Yucatán. Sayil, located approximately 25 km south of Uxmal is a Terminal Classic (ca. 800-1000) Puuc site. Proskouriakoff (1931:68) categorized this particular sculpture as a Mixed and Decadent type. Decadent sculptures are distinguished by their cursive quality and "tendency toward patterned, geometrical arrangements." Proskouriakoff (1931:169) suggests that this type of scuplture represents "contemporary manifestations of a general trend away from naturalistic representations and toward the exaggeration of stylistic mannerisms irrelevant to the subject." This description applies to the painting style from Chichen Itza where the capstone from Las Monjas demonstrates the naturalistic and cursive style so prominent in Classic Maya art. The capstone from the Temple of the Owls breaks away from this Classic style, the glyphs form distinct blocks as noted on Mixed and Decadent type sculptures from Xculoc (western Puuc) and Sayil. The transitional style detected in sculpture from the Puuc region as well as the overall subject matter share similarities with the painting at Chichen Itza.

The subject matter is more abstract than that of the capstone from Las Monjas, yet the figure represents K'awiil standing inside a "sunken cavity containing cacao pods" (Taube 1994:226). According to Taube (1994:226) the capstone "contains one of the most detailed iconographic programs dedicated to cacao known for ancient Mesoamerica."

In the Yucatán, K'awiil appears in works of art associating the deity with cacao,

elites, and merchants. A capstone from an unknown provenance in the Yucatán, housed in the North Carolina Museum of Art, contains a scene of two seated individuals facing each other (Fig.28). The individual on the right is the deity K'awiil sitting on a bench decorated with glyphs. K'awiil with the diagnostic rectangular forehead and torch, holds, according to Mayer (1980:58), maize leaves or maize ears. The individual sitting in front of K'awiil has been identified as the maize god (Mayer 1980:58). Diagnostic characteristic of the maize god is "a youthful head with a curling elemenet infixed in the parietal region of the skull" (Taube 1989:31). Elements associated with the maize god include water lilies, water fowl, fish, and aquatic fowl (Taube 1989:31). With exception of possible vegetation or plumage projecting from the back of his hat, this individual does not share similar characteristics with the maize god. He wears a brimmed hat with elaborate plumage, carries a bundle on his back or perhaps is hunchback with a large oblong bundle wrapped in a jaguar pelt, perhaps a merchant bundle behind him and presents a bundle offering to K'awiil. Bundles are common attributes found with merchants in pre-Columbian art, clearly representing the goods transported. This individual may be associated with merchants. He sits on an oval object that appears to be the glyph po that rests on top of a round seat covered with a jaguar pelt. Protruding from the seat is the profile of a human head with three pendants (Mayer 1980:58). Glyphs appear in the upper left corner, the individual on the left, and between him and K'awiil. One of the glyphs appears to represent kakaw-cacao.



Figure 28 Merchant Capstone from unknown provenience in Yucatán. From Mayer (1980:Pl.168).

In sum, the capstone from Las Monjas resembles the Late Classic period style with its naturalistic feel and smooth cursive-like execution, while the style of the Temple of the Owls' capstone reflects a later date with a more rigid, geometrically patterned style. The other wall paintings in this category are the eight stylized serpents believed (Morris et al. 1935:plate 132) to have once covered the entire east and west axis of the two

interior rooms of the Temple of the Chac Mool, a portion of the Northwest Colonnade, and the substructure of the Temple of the Big Tables.

In the Temple of the Chac Mool murals, the rigid, scaled serpent body with triangular rays projecting from it, suggest movement and rhythmical order because of the similar motifs displayed in a pattern. From the gaping mouth of the serpent, a long,

curving, bifurcated tongue reaches down and rests directly above horizontal bands. A few scales down from the head, a small arm in the form of a bird claw reaches out. Rather than the numerous plumes commonly depicted on the sculpted serpents at Chichen Itza, these serpents have flower-like appendages ascending from their several curves, tail, and crown. The appendages contain yellow bulbs topped by a small patch of brown with five long blue stems capped by yellow petals projecting outward. Flowing from the serpent's body, these flower-like appendages share a striking resemblance to a mural in Teotihuacan, a Classic period archaeological site in Central Mexico.

Unfortunately, this mural and several others from Teotihuacan were cut into large sections by looters and sold on the black market during the 1950s or 1960s. Forty fragments are known to exist and can be found primarily in The Fine Arts Museum of San Francisco and other North American museums. After survey and excavation in Teotihuacan, René Millon (1988:84) determined that the fragments of these murals were from a section of the city known as Techinantitla, an administrative/temple/elite center dated from the Metepec phase A.D. 650-750 (Pasztory 1988:73).

Similar to the mural in the Temple of the Chac Mool, the mural from Teotihuacan consisted of four long feathered serpents painted across a wall; however the serpents in the Teotihuacan murals sit directly above four sets of flowering trees. Of particular interest was a section of the mural on a doorway border (Fig.29). Projecting from the serpent's body, are five-stemmed flower-like appendages. The red stems have green leaves and are capped by bell- shaped blue flowers with yellow centers. Although the murals are not identical, both the contexts are similar and located in areas that served similar functions.



Figure 29 Doorway border mural fragment from Techinantitla, Teotihuacan, A.D. 600-750. From (Berrin 1988:Plate 14)

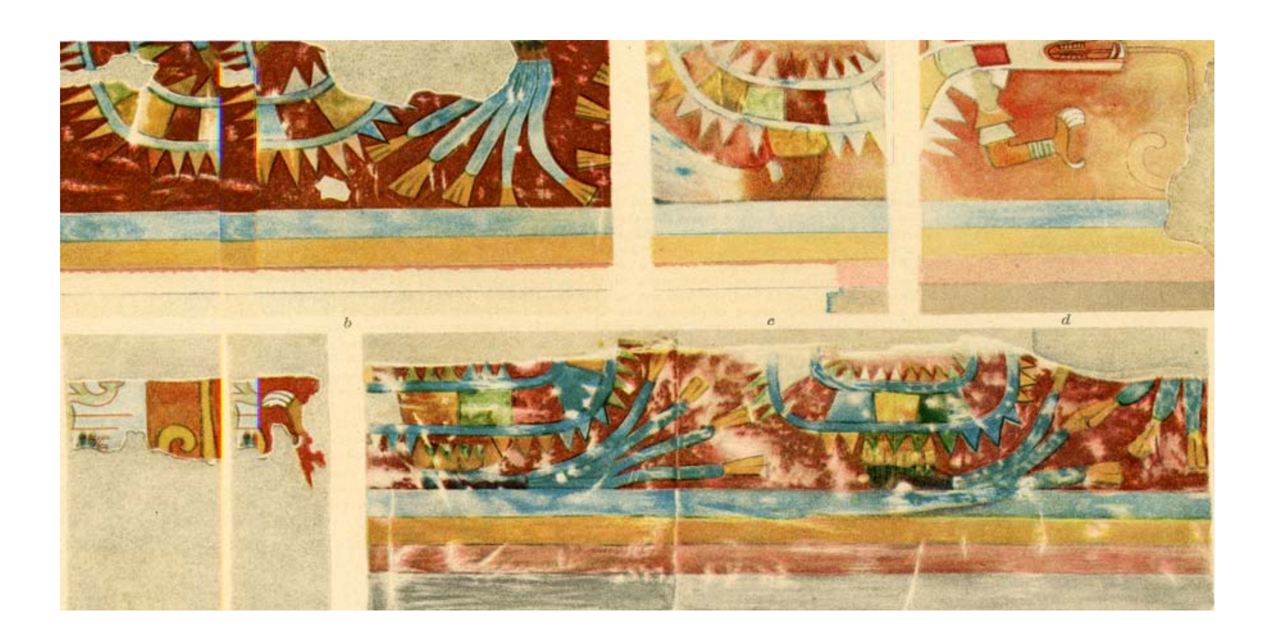


Figure 30 The Temple of the Chac Mool Mural, Inner Sanctuary and Outer Chamber. From Morris et al. (1935:Plate 132).

The murals in the two chambers of the Temple of the Chac Mool were first drawn

with charcoal on the white plastered wall, filled with color, usually of flat washes, and finally outlined a second time with black pigment (Morris et al. 1931:364). Morris and Charlot (1931:364) suggest that the colors in the serpent murals "seem to have been mixed with an extremely viscous fluid which did not readily accept the pigment in solution." As a result, the colors on the wall appear uneven in application, "striated with myriad threads of the clear, untinted medium." The wall paintings commonly "have the flat surface and clear transparency of water colors" (Morris 1931:189).

Morris and Charlot (1931:415) added that although the design and subject matter is similar in both chambers, the outer chamber murals were painted and drawn by a more skillful artist. With more attention to quality, the artist thoroughly mixed the color with the medium to produce a more brilliant, and opaque appearance of the paintings. The original drawing also flows more fluidly than those of the inner chamber because lines and contours are not as abrupt.

The subject matter of the Techinantitla and Temple of the Chac Mool is similar. Unlike Teotihuacan, where animal symbolism is depicted in several murals, the serpent murals in the Temple of the Chac Mool, a fragment in the Northwest Colonnade, and the uncovered portion found in the substructure of the Temple of the Big Tables are the only examples of exclusively animal images found in this medium at Chichen Itza. This serpent image was also found in the Sacred Cenote of Chichen Itza on a face or mask ornament of hammered sheet gold and on a turquoise mosaic encircling a mirror beneath the surface of the floor where the altar once stood in the Temple of the Chac Mool (Morris 1931:186).

Tozzer (1957:fig.245) identified the painted serpents as Xiuhcoatl, the "blue

serpent" or "precious-turquoise serpent", associated with turquoise, grass, and the solar year, elements related to fire in Postclassic Central Mexico (Miller and Taube 1993:189). According to Miller and Taube (1993:189), during the Postclassic Xiuhcoatl, controlled by Huitzilopochtli, symbolizes the "fiery rays of the sun dispelling the forces of darkness." Taube (1992) has associated Xiuhcoatl with the ancestral form of the War Serpent from Teotihuacan and adds that this deity is found in Classic Maya art in the context of war. Commonly depicted with a mosaic headdress in the form of a serpent head and appearing frequently with smoke or flames (Miller and Taube 1993:163). Kubler (1982:182) notes that Xiuhcoatl often appears opposite Quetzalcoatl in the Basin of Mexico and is "linked to fire and destructive heat in the annual two-season alternation of drought and rainfall."

The vegetation projecting out of the serpent's body may be similar to Lincoln's (1994:179) interpretation of the feathered serpent. When a rattlesnake turns between 50 and 55 years old its skin begins to ruffle resembling feathers and the growth of fresh branches or leaves on trees. Lincoln (1994:179,181) interprets this vegetative property of the serpent as sprouting lineage/vegetative regeneration for the Itza.

The Temple of the Chac Mool murals indicate a change in location of wall paintings from private to more public settings. Prior to the serpent murals in the Temple of the Chac Mool, the few examples of painted surfaces are found on capstones. These capstones, located in conspicuous and dark areas at the highest point within an interior structure, required an onlooker to have either prior knowledge of their location, or a considerable amount of light to view them. In addition, the content of the paintings, specifically the glyphs, were painted at a very small scale, which would be very difficult

to read standing at the room's floor level. The capstones were intimate works of art and not designed to be seen by large groups of people or, for that manner, by anyone. In contrast, the images projected in the murals at the Temple of the Chac Mool are located in highly visible areas, represented in a larger scale within the architectonic space, indicating the presence of a larger audience. However, I am basing this observation on the murals recorded in the city, considering the possibility that wall paintings (not painted capstones), of greater antiquity may have existed.

4. Historical Events

Life events, such as warfare and ceremonial processions, depicted in painting in a narrative form are found in the benches in the Temple of the Chac Mool, the murals of the Temple of the Warriors, the Upper Temple of the Jaguars, and Las Monjas. Narrative art is a "form of art that depends on subject matter to tell a story" (Ocvirk et al. 1985:248). I believe with the murals in this category the role of art changed in this period at Chichen Itza into a tool to communicate with a diverse audience without the use of writing. In other words, murals became a translator to replace another media, writing, and played the role of narrating and describing specific events.

Following the guidelines of Weitzman (1947:29), Quilter elaborated on what form narration takes when represented. The simplest and most frequently used is that of a frieze form where all figures share a common ground line (Quilter 1997:117). The second form is an ornamental pattern with a subordinate scene. An example of this form

is a sarcophagus that depicts several different events, with the most important events as the most prominent (Quilter 1997:117). A third way of narrating is by inserting scenes into a column or text. The fourth form is the most difficult to distinguish because it consist of an isolated segment in a narrational sequence. In other words, a scene is taken from a story and depicted in an isolated setting, often resulting in the inability to associate the scene as part of a larger narrative cycle (Quilter 1997:117).

The north and south L-shaped benches in the Temple of the Chac Mool are an example of a frieze form of narration in painting because the painted images of at least twenty-three individuals share a common ground line. This type of individual arrangement is categorized as a procession and first appears in the Yucatán at Oxkintok, Kabah, Halakal, and Uxmal (Proskouriakoff 1950:170) in stone sculpture form. However, in painting, processions, on or not on a single groundline, appear in Mesoamerica before the Postclassic period. For example, a two panel mural from Suchilquitongo, Oaxaca (300-500 A.D.), located in a funerary chamber identified as Tomb 5, depicts military processions and ritual scenes of several generations. Murals from Las Higueras, Veracruz (600-900 A.D.), portray a procession of individuals holding musical instruments─conch shells, figures holding sticks, and figures holding cords, alluding possibly to lineage. In the Maya area, the Early Classic paintings from Uaxactun and the Late Classic murals from Bonampak also depict human figures in processions.

The people painted on the Temple of the Chac Mool benches appear to portray warriors, priests or god impersonators, and elites. According to Morris (1931:453), and

Taube (1994:220), god impersonators representing God B or Chaak (Fig.31), the rain and lightning god, and Chaak Chel, goddess of creation and fertility (Stone 2000:304) are painted on the south bench. The five Chaak impersonators seated closest to the inner sanctuary entrance display attributes of Chaak─with a wide-brimmed hat, a long snouted zoomorphic head, and a wavy serpent staff. Although five Chaak impersonators are depicted in this painting they occupy a fairly restricted space in the art of Chichen Itza, found mainly in the Temple of the Warriors Complex; whereas Chaak Chel impersonators and the image of her appear widely in the art of the city (Stone 2000:304) . In the contexts found at Chichen Itza, scholars (Coggins 1984:160; Taube 1994:230; Stone 2000:311) have suggested that Chaak Chel functions as an ancestral creator goddess, "a Mother-Earth like being representing the earth's surface" (Stone 2000:311). The old goddess is also associated with rainbows, terrestrial water to fertilize the earth, and cyclical rhythm of life (de la Garza 1998:245).

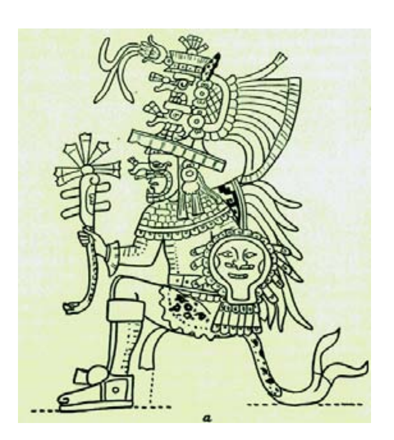


Figure 31 Temple of the Chac Mool bench. Possible Chaak Impersonator. From Morris et al. (1935:fig.305a)

Seated in front of Chaak, the three Chaak Chel (Fig.32) impersonators carry bowls, a common task for this specific deity, filled with conical offerings. Taube

(1994:230) suggests these conical offerings are tamales, but I am dubious that they represent tamales considering that other examples are ball-like. These conical offerings are more representative of copal or tobacco bundles. Two of the three Chaak Chel impersonators carry colorful rectangular shields, considering that their costumes do not appear militaristic and the warriors are sitting together on the north bench, these shields may be an offering of flower shields. Sahagún (1959:38) describes an event where before a banquet given by merchants began, debt was paid to the gods, in this case to Hutzilipochtli, of incense, tobacco, and flower shields. The speech scrolls and name glyph near each god impersonator on the north bench are similar to the god impersonators in the murals of Techinantitla from Teotihuacan.



Figure 32 Temple of Chac Mool bench. Chaak Chel Impersonator. From Morris et al. (1935:fig.302)

Continuing with the first individual on side B, Fig. IX, seated near the deity impersonators was an individual classified by Morris as “Old Man with a Bone” (similar to Fig.35). This aged individual holds a long staff in his right hand, a fan in his left hand,

and a quilted head cloth strapped to his forehead. Items associated with merchants or wealth in historical documents include small roundish fans, staves, tumplines, tumplines worn as headdresses, packs, and bags (Webb 1973:395). Similar individuals appear on the sculpted stone columns from the Temple of the Chac Mool, Column 6 and the Northwest Colonnade, Column 52E. The presence of merchants in both the columns and benches of administrative/elite structures in the city suggest that they occupied a prominent position in society.

The images that remained on the north bench, side A and side B contain fragments of eight warriors seated upon abstract jaguar style benches (Fig.33). On the corner of the bench by the altar were stone painted fragments of probably two intertwined serpents with a head adorned with "a blue supra-orbital plate and yellow beard" (Morris et al. 1931:380). On side C of the bench is an image of an old woman wearing a white skirt with a blue belt, carrying a pot tied around her waist (Morris et al. 1931: 381).



Figure 33 Temple of the Chac Mool bench. Warrior. From Morris et al. (1935:fig.306)

The presence of warriors on these benches reveals the growth of this sector in society.   Military power served to protect a growing city and as an auxiliary to merchants and trade in general by policing, for example, caravan routes (Polanyi 1975:135). During this and the following construction periods, the military culture of Chichen Itza began to develop, as did the complexity of trade, as noted so brilliantly on the walls in the Temple of the Warriors.

As mentioned previously, the Temple of the Warriors is located on the eastern side of the Great Terrace. This architectural complex is “one of the largest continuous enclosed precincts of any pyramid-temple complex in the Maya area” (Stone 1999:313). This large complex accommodated large groups convening to perform ritual events or

perhaps settle matters of state. Ascending through the massive colonnaded structure was a wide staircase leading into a double-chambered temple that housed the numerous murals recovered by the Carnegie Institution. The murals that decorated the partition wall across the center of the temple were the most intact. The location of these murals can still be identified because the disarticulated polychrome stones were never consolidated in their original position. Instead two gaping holes stand in their place.

In the front chamber, two rows of six low-relief columns stand in the main area of the structure. The murals in this building introduce a new narrative style in mural painting in the city. The narratives become extremely detailed with tremendous interest in describing individuals, structures, animals, plants, locations, and actions. Based on the four narration forms (Quilter 1997:117), the murals would fall into the fourth category of representing an isolated segment in a narrational sequence. However, because the murals are part of a sequence, the scenes are probably associated and part of a large narrative cycle.

Because of such attention to detail, I believe the narrative murals at Chichen Itza portray specific events that transpired during the course of the city's history, replacing the traditional form of recording events with writing. Given the city's incorporation of numerous elite participants who probably came from various cities, the artistic program required a generic form of communication. Consequently, the narrative murals almost possess a stylized character; however, at the same time, the figures are realistic when considering details in costume, accessories, and movement.

A design element that begins to appear frequently in painting and present as early as the Temple of the Chac Mool benches is the sound scroll protruding from the mouths of individuals. This design element is found in Teotihuacan's Xolalpan phase where "all living beings, including shells, may be shown with sound scrolls in front of their mouths" (Pasztory 1988:70). According to Pasztory (1988:70) "sound scrolls indicate great emphasis on oral communication". The function of the sound scroll in painting would coincide with the replacement of the hieroglyphic text with narrative murals and sculpture which emphasizes the importance of communicating to a larger and more diverse audience.

The artist, restricted to a pictorial plane, organized the buildings and humans engaged in various activities in a manner providing a sense of depth to the overall composition. This allusion is not achieved by changing scale, but rather replacing them with natural boundaries, such as a village or body of water.

On the north partition wall in the Outer Chamber is the mural entitled "The Battle Scene". The village inhabitants, distinguished by stripes on their body, are under attack by an outside force of black-painted warriors. Two of the striped figures are carrying large bundles with a tumpline, Morris suggested these individuals may be fleeing from their village or perhaps they are carrying goods, tribute, to their attacker. Other striped-painted, nude prisoners are led away in a procession of black-painted warriors holding ropes binding the prisoner's hands.

Some of these prisoners of war may have been sacrificed during ceremonial events, but it is possible that these striped victims were rounded up for slave labor. On a

small mural fragment in the southwest corner of the inner sanctuary is another striped human figure in an awkward position on a temple holding an unidentifiable object. Morris et al. (1931:430) postulated that perhaps this individual is holding a trowel and the individual is participating in the construction or refinishing of the temple. If this individual is in fact a laborer he is identical to those taken captive in the Battle mural.

On the other side of the Battle Scene partition wall in the Inner Sanctuary was a mural of “rows of warriors, priests, dignitaries marching in formal procession” surrounded by a broad blue frame (Morris et al. 1931:398). This mural was not pieced together because it was too difficult to determine the order of the individuals in procession.

Unfortunately, the mural (Areas 19) on the south partition wall in the Outer Chamber revealed only fragments of an intense battle near and in water between black-painted warriors and “red people with long, flowing, yellow hair”, along with a scene of human sacrifice of one of the yellow haired people by black painted people in the central portion (Morris et al. 1931:398). The fragmented pieces of Areas 20 and 21 along the same wall seems to portray the continuation of the battle previously mentioned the black painted people are attacking from the shore and others in red canoes.

The “Fishing Village” mural (Area 31), located on the south partition wall in the inner sanctuary, is the most revealing painting of economic activities. The lower one third of the mural is of the sea filled with marine specimens such as fish, snails, crabs, and turtles. Three canoes navigate through the body of water with an oarsman and two warriors. Three merchants or porters carry bundles, and a man with a stave walks

directly behind one of the porters, perhaps a merchant. The merchant/porter in the upper left corner stands near a group of interesting objects: four rectangles with horizontal bands, two possible vessels, and two motionless women in simple white kilts. The rectangles may represent bundles of cloth, the vessels are likely filled with perishable material, and the women are presumably slaves, judging from their position and clothing. In addition, five different types of trees are depicted, several fish lie on the ground, while others are neatly piled into a basket.

The majority of the murals decorating the entire interior of both rooms may refer to commercial activity, specifically near large bodies of water. Several stone fragments recovered in the inner sanctuary included small images of: water resources (several species of fish, crab), a fenced henequen field, a cactus field, tree with red fruit, tribute rolls, two lengths of cloth, textiles, a possible cenote with large aquatic creatures beside a temple platform with a collection of offerings, various temples, various representations of birds, and serpents (Morris et al. 1931:395-430). In sum, ceremonial events were rarely depicted, with the exception of the sacrifice scene, and a procession in the Temple of the Warriors.

Unlike the Temple of the Warriors, the entire art program in the Great Ball Court documents large public ritual events. The reliefs in the North Temple illustrate ceremonies of a ruler's accession, including the use of the ballgame to confirm accession rites (Wren and Schmidt 1991:222). The ballcourt stone panels portray six ballgames, each having two teams of seven players, with the theme of blood sacrifice graphically depicted (Greene Robertson 1991:102). The theme of sacrifice is also seen in the Upper

Temple of the Jaguars paintings but essentially appears as a reflection following the detailed narrative portraying the complex nature of war in the Early Postclassic.

It is appropriate that the most descriptive mural images of war are incorporated into the decorative program of the Great Ballcourt. However, unlike the graphic and rather gory images of war at Cacaxtla, Central Mexico, war in the Upper Temple of the Jaguars mural sequence appears as a martial art form. The artist emphasizes movement, strategy, and the overall sequence of events involved in an actual battle. However, these battles appear as offensive strategies and not a defensive problem (Hassig 1992:128), with scenes portraying attacks in well-established and different locations. Unlike the Temple of the Warriors battles, the Upper Temple of the Jaguars battles appear to be well planned conflicts between large military armies and not raids. Directly above the *pauahtuns* on the south and southwest panels are temporary but elaborate military camps. In both scenes, generals or nobles, some seated on jaguar pelt benches are deeply immersed in either negotiations or strategic military planning.

The movement and maintenance of an offensive army required Chichen Itza to be in a comfortable economic and political position to sustain a moving army and protect its city while generals, nobles, and warriors were away. It is possible that some food was carried and perhaps resupplied with resources from centers that previously pledged or were forced to form alliances with the Itza.

The latest in the mural sequence at Chichen Itza, the Upper Temple of the Jaguars and Las Monjas murals focus primarily on Chichen Itza’s military strength, a direct result of the city’s economic growth. The art of mural painting in this period was at its climax.

The blending of colors, the solution used to bind the pigments, and attention to detail in scale, character, movement, and distribution of space were more developed

In the Upper Temple of the Jaguars the perception of depth is manipulated in a similar manner to that in the Temple of the Warriors. The artist, restricted to a flat surface organized the scenes by distinguishing between activities and using structures and color to create boundaries and depth. The *pauahtuns* in the lower section of the murals suggests that they are underneath the central scene supporting it with their hands. The individuals directly above the *pauahtuns* appear closer, while viewing further towards the top of the painting where in the southwest, northwest, south, and southeast panels a village is painted with a blue background. Although there is not a change in scale, it appears that this is the farthest point from view because this is the only distinction of a horizon.

However, scale is improved in the Upper Temple of the Jaguars. For example, in the Temple of the Warriors, the fish and birds are oversized and the trees are unusually small. Although the Temple of the Warriors murals are not consistent in scale, there does not exist an individual, object, or scene that is considerably larger than any other, implying that the artist is calling equal attention to all parts. In contrast, in the Upper Temple of the Jaguars two individuals were painted on the back wall and painted six times larger than the rest of the individuals in the mural sequence. The artist obviously intended to call attention to these two individuals, meaning that everything was not equally important. Although these individuals are part of the mural sequence, they will

be considered in the following category because the distinction between these two men in grandeur is rare in the art of the city.

5. Aristocratic Themes

The aristocratic theme category represents human portraits on the capstones of the Northwest Colonnade and the Temple of the Tomb; and the center east panel in the Upper Temple of the Jaguars. Numerous portraits exist in Chichen Itza, but the overwhelming majority are carved in stone and grouped with other individuals. The capstones are unique for Chichen Itza because an individual is singled out and placed at the highest point and for the case of the Upper Temple of the Jaguars and the most prominent in an interior structure. As mentioned, capstones appear in several sites in the Yucatán and Campeche during the Terminal Classic; the majority represents the deity K'awiil but some represent rulers.

The earlier capstones from Chichen Itza, placed in the Late and Terminal Classic, portray K'awiil and share stylistic similarities. However, the later portrait capstones from the rubble of the North Colonnade, the Temple of the Tomb, fragments recorded by Morris in the Temple of the Warriors, and another near the Group of the Thousand Columns all represent portraits of individuals.

Distinct from the capstones of Ek' Balam, the glyphs at Chichen Itza are difficult to decipher when they are present. Based on their use in Ek' Balam, similarities can be drawn. The Temple of the Tomb capstone was found in the remains of a vaulted tomb at the west edge of the terrace. The capstone was either from below the floor of the terrace

in the tomb or from the temple recovered by Thompson (Morley 1946:fig. 53; Ruppert 1952:149). The style of this painted capstone suggests the transition from the Early to Middle Phase of the Kukulkan/Sotuta Complex. The individual wears a mosaic headdress, a breast ornament, bundles of spears, a spear in the right hand, decorated garters, bands below the knee, sandals, a pendant nose ornament, and a conventionalized bird design on the front of the headdress or breast ornament. The man is both a warrior and a ballplayer and evidently an important figure in the city's history. This capstone and the Temple of the Owls capstone are the last paintings that utilize glyphs at the site.

The capstones from the frontal chamber of the Temple of the Warriors, the North Colonnade, and the Group of the Thousand Columns are identical in style and placed in the Middle Phase of the Kukulkan/Sotuta Complex. The paintings are uniquely rendered in a stencil-like style with intense colors of yellow, pinkish-red, and turquoise. The individuals depicted on them are elaborately adorned in a mosaic of accessories of possibly jade and/or turquoise. These capstones may represent three different individuals, but I am more inclined to suggest these are one individual. Furthermore, if the capstones continued to be used as dedicatory objects to commemorate the completion of a building we may be looking at the person responsible for the construction of the Temple of the Warriors Complex, in other words a possible ruler of Chichen Itza.

Finally, the fresco in the Upper Temple of the Jaguars of two confronting captains referred to by Miller (1977b:209) as Protagonist (the figure on the right), Captain Serpent, and Antagonist (the figure on the left), Captain Sun Disk. The right figure was identified by both Miller (1977b) and Coggins (1984) as a Toltec and the left figure as a Maya. In my opinion there is not enough evidence in the paintings to determine

ethnicity, or that these specific individuals can be identified in the mural sequence. The only likeness “Captain Serpent” shares with other individuals in the mural sequence is the coiled feathered serpent but, as mentioned previously, this appears around at least twenty individuals. As for “Captain Sun Disk”, the similarities between the person in the portrait and the individual actually seated in a disk in the murals are less than the number of differences.

The roles of these two individuals are difficult to determine, but based on their prominent position in the structure they may have been rulers or military heroes. Of particular interest in this double portrait is the gold worn on these two figures. In the murals, this appears to be the only painted representation of this resource in the city. The helmets of both individuals and a large pectoral worn by the figure on the right are made of gold, and both wear large pieces of jade jewelry.

The gold and possible turquoise accessories worn by the individuals in the Upper Temple of the Jaguars and the capstones indicate the intensity and distance that trade reached in the last centuries of Chichen Itza’s power and will be further discussed in the following chapters.

6. Summary

It is unfortunate that historically the murals from the Temple of the Warriors have been categorized with the Upper Temple of the Jaguars murals because their content and the function of the Temples were considerably different. The murals in the Temple of the Warriors and the Upper Temple of the Jaguars have repeatedly been cited to prove “the political and military subjugation of the Maya by the Toltec” (Wray 1945:27). The supposed identification of two opposing forces, Toltec and Maya, in these murals has

supported a conquest hypothesis. Unfortunatley, assigning ethnicity to individuals has clouded interpretations of the city.

The paintings at Chichen Itza reflect the development of the city, alluding to the importance of commerce and the individuals participating in this interaction. The art of painting evolved simultaneously with the center's growth and its social composition. The introduction of a complex narrative program replaced the use of writing to describe important ceremonial and military events to a social and culturally diverse audience. However, the interpretation of these narratives to determine the historical sequence of a city is risky when considering that characteristics of narratives include:

> 1. Every narrative however seemingly "full", is constructed on the basis of a set of events which *might have been included but were left out*, and this is as true of imaginary as it is of realistic narratives.
> 2. Everywhere it is the forces of disorder, natural and human, the forces of violence destruction, which occupy the forefront of attention.
> 3. A genuinely historical account had to display not only a certain form, that is, the narrative, but also a certain content, namely, a political-social order-it is the State which first presents subject-matter that is not only *adapted* to the prose of History, but involves the production of such history in the very progress of its own being.
> (White 1980:10-11)

Coggins (1984:157) interprets the Upper Temple of the Jaguars murals as the "victory of Venus over the Sun, of night and the stars over day, and of the Venus-warrior Toltec over the Maya and other Sun-associated peoples." Miller (1972:224), on the other hand, suggests that murals "may well illustrate the momentous events in the Pasión drainage during the Terminal Classic Period." The possibility of proving these interpretations is low without the aid of additional data. Despite, the difficulty interpreting narratives and art images in general, we are fortunate that Maya artists are notorious for documenting in detail historical or mythical events, and it is those details that can be analyzed to help

reconstruct the richness of their culture. Perhaps historical events can never be entirely interpreted, but by reviewing detailed elements in the murals and establishing chronologies of the paintings other indicators of socioeconomic patterns can be detected.

As discussed in this chapter, by the Late Classic the elite of Chichen Itza utilized painted capstones similar to other contemporaneous centers in the Yucatán Peninsula to commemorate the construction of a building by the local leader, to serve as possible portals, and to present offerings to the god K'awiil who was linked to wealth, power, and elites. The capstones, with glyphic texts describe events and individuals and the style suggests scribes may have painted these stones. However, the Temple of the Owls capstone with almost indecipherable glyphs reveals a transitional style found in both painting and sculpture in the peninsula. Finally, the later capstones from the northern section of the site abandon the use of glyphic texts completely with a distinct stencil style. Coinciding with the capstones from the Temple of the Warriors Complex, murals appear in more publicly viewed sectors of the city. Paintings of large serpents decorated administrative locations while individuals with speech scrolls and symbols were arranged in procession on benches. Glyphic texts in painting and stone were no longer apparent and were replaced entirely with descriptive narratives in both mediums.

In the following chapter, the economy of Chichen Itza will be reviewed to understand how the changes in mural style and content may be associated.

VI. Chichen Itza and Trade

1. Introduction

This chapter examines long-distance trade in the Yucatán Peninsula and Chichen Itza's participation in these socio-economic changes during the Late Classic to Early Postclassic periods. A brief review of the basic concepts of trade and evidence of northern Yucatecan trade provides the framework for discussion evaluating the economic systems in this region and the agents who participated in their development. Chichen Itza's participation in the export and the import of goods in the Yucatán Peninsula, specifically the northern coast, will be explored with evidence from the center's murals.

2. Basic Concepts of Trade

"Trade" in this discussion will refer to an exchange of material goods over a large distance from one social unit to another (Renfrew and Bahn 1996:336). Although this definition oversimplifies the concept of trade, it serves to explain the basic concept of trade. During the 1950s, the meaning of trade and economics in the field of anthropology became recognized as not only a transaction of materials between one society and another, but as an elaborate process of social behavior and organization. Karl Polanyi was largely responsible for this new funcionalist perspective that "viewed exchange as the material base for society and as an organization imbedded in society's institutions" (Earle and Ericson 1977:3). Polanyi's work encouraged anthropologists to look beyond a market economy system bias by demonstrating that "economy is an instituted process" (Polanyi 1957:250). Polanyi showed that throughout history economic activities are embedded in social relations; but with the introduction of self-regulating market

economies, economy and society became separated. Polanyi "believed that tribal societies, because of their simplicity, revealed most clearly the nature of economic activity" (Baum 1996:12). He created a "tool box" to explain the different types of economic activities. This "tool box" or modes of exchange can be utilized to study "the manner in which the economic process is instituted at different times and places" (Polanyi 1957:250). Polanyi's three different types of modes of exchange are reciprocity, redistribution, and market exchange.

Reciprocity implies a movement of goods between individuals who are more or less equals. The exchange of goods is normally based on a concept of gift exchange, where after receiving a gift the receiver eventually has to give one in return (Renfrew and Bahn 1996:338).

Redistribution refers to appropriational movements of goods toward a center and then out of it again. Since goods are redistributed from a center, internal exchange becomes structured with several societal subdivisions (Polanyi 1957:254).

Market exchange refers to a specific central location (marketplace) where transactions of goods occur (Polanyi 1957:250; Renfrew and Bahn 1991:338).

Ethnologist M.D. Sahlins complemented Polanyi's work by placing the modes of trade into an evolutionary framework. Sahlins utilized the concepts of redistribution and reciprocity to demonstrate societal complexities that evolve to accommodate the demands of exchange. For example, he discusses that with primitive trade not "anyone can just get into the act" of trade, "trade is an exclusive relation with a specific outside party" (Sahlins 1972:298). Trade partners are not established through the prices between buyers and sellers, but rather through their social relations (Sahlins 1972:298).

Production

Since different forms of production usually correspond with different forms of exchange (Earle 1982:8), the appearance of craft specialization in the archaeological record becomes an important indicator of evolving complexities in an exchange system. Specialization in a society implies that several social dynamics are occurring within and between societies to accommodate exchange demands of subsistence products (food and procurement tools) and luxury goods to accommodate an elite population.

These social dynamics begin as a population increases, eventually filling a demographic area and restricting communities from moving freely around to acquire resources. Local communities will begin to specialize in production of optimal resources in their area to exchange with other communities, resulting in a certain level of interdependence of an exchange system that provides materials that are not necessarily available in their area. Normally these production demands create greater numbers of craft specialists who do not have control or access in the exchange. Redistribution of goods is controlled and organized by a centrifugal force, particularly the elite of a society. With an increased demand in exchange and production the society becomes more stratified, specializing in, for example, agriculture, fishing, weaving, etc., and, consequently, more vulnerable in terms of relying on others to complement their diet and additional resources (clothing, tools, etc.). The dependence in an exchange system managed by a privileged few eventually evolves into a specialization of personnel, such as merchants and a military to facilitate exchanges, enforce production, and create the eventual lowest rung on the social ladder─slave laborers and prisoners of war.

Distribution

In a stratified society, political leaders play an important role in organizing specialization and exchange, but in a political economic model their activities are believed to benefit the elite members of society more than the population they administer (Brumfiel and Earle 1987:3). According to Brumfiel and Earle (1987:3), mobilization is at the heart of political development because it is considered, "the transfer of goods from producers to political elites" (Brumfiel and Earle1987:3). This transfer serves to sustain elites and allow them to finance and establish new institutions and activities that will extend their power and serve their interests more effectively.

But a critical component in establishing an effective exchange system is to determine the cost of exchange or transaction costs, such as the presence or absence of trading partners, formal alliances, and social boundaries and the fear of assault, sorcery, mockery, and other hazards of the trip (Hirth 1984:296). Ensminger (1996:25) suggests that by creating "complex ties that cross-cut social and political domains" between the participants involved in exchange, transactions costs are reduced because shared ideological orientation may ensure a certain level of predictability and trust between the two parties.

3. Evidence of Long-Distance Trade Activities in Northern Yucatán

Trading Ports

During the Late Classic and Early Postclassic, maritime technology and trade probably played a role in the socio-economic changes that occurred in Northern Yucatán. So far over 150 Postclassic sites have been recorded on the coast of the Yucatán Peninsula, which far exceeds the quantity of sites in the interior (Andrews 1978:82;1998:18). These sites, and other Mesoamerican coastal sites, reveal that interregional interaction intensified with the development of a complex coastal trade route linking the Gulf Coast, Yucatán, and Central America. The ceramics and obsidian recovered from the Postclassic Yucatán coastal ports suggests that this segment of the peninsula route had an intimate relationship with Chichen Itza, and it is probable that the Itza were in control of this zone and shared a political, economic, and military unity with these ports (Andrews 1978:86).

For example, at the site of Cozumel, until approximately A.D. 700, occupation was sparse. But after A.D. 700 settlements and the quantity of slateware, fine orange ceramics, and Pachuca obsidian increased. The types of ceramics and obsidian recovered on the surface and in massive substructures (possible warehouses) indicate strong economic ties to Chichen Itza (Kepecs et al. 1994:143).

Ports of Trade

Four types of Ports can be distinguished on the Yucatán Peninsula: commercial ports–centers of exchange; strategic ports for long-distance trade which passes through to the interior; embarking ports for travel between islands; and ports to travel into the

interior (Andrews 1998:19). The most prominent ports along the Yucatán coast are Champotón, Campeche, Jaina, Canbalam, Xcopté, Punta Cerrito, Isla Cerritos, and Vista Allegre. The patterning of the major and minor ports suggests that their locations provided an obvious advantage for commercial and military operations (Andrews 1978:86).

The variation of ports demonstrates the high level of organization of the Itza state and its ability to deploy an extensive network of outposts along the north and west coasts of the peninsula. These outposts enabled the Itza to capitalize on coastal resources and the salt trade, and allowed them to establish mercantile and military bases that ensured control of the entire coastal trade network.

Economically, control of the coast provided access to two commercial spheres: internal commerce, because the Itza could control the distribution of marine resources and salt to the interior; and long-distance commerce, where salt and other products were exported to the distant Mesoamerican interior in exchange for materials such as obsidian, jade, metals, and ceramics that were concentrated in the Itza capital (Andrews 1978:89).

4. Northern Yucatán Exports

Based on ethnohistorical evidence, the Maya exported from the Northern Yucatán a variety of products. The principal exports were salt, cotton, and cloth. Secondary exports were honey, wax, copal, achiote, henequén, cacao and slaves. It is most likely that the majority of these goods and slaves were transported via maritime routes, and passed through intermediate ports to their destinations.

Salt

The salt beds on the northwest and north coasts of the Yucatán Peninsula are a major source of salt in Mesoamerica. The beds were formed during the early Holocene "underneath and along the edges of a chain of estuarine lagoons and swamps" (Andrews 1983:22). Saltmaking has been an economic activity in the Northern Yucatán for at least 2,000 years, but during the Early Postclassic, salt production and distribution became a major industry in this area.

Archaeologically, abrupt changes and intensity of salt production can be detected in the settlement patterns of the north coast of Yucatán. Classic period sites are abandoned in this area, while later sites are established at strategic place such as islands, mouths of rivers or estuaries, or next to important salt-making areas (Andrews 1983:32). The strategic location and ceramics at these sites suggest that the Itza were responsible for the foundation of these new areas. According to Andrews (1983:32), the establishment of the Itzas at key trade and military positions allowed them "to take over the coastal trade networks and eventually gain control of the rich saltbeds of the north coast."

An important salt-production zone was Emal in the Río Lagartos estuary. Emal was built in the Classic period but expanded during the Terminal Classic and Early Postclassic. This site was an elite ceremonial center with over 56 large structures and no common households near the elite architecture. A pair of standard bearers at the entrance of the site was identical to those on the Guerreros temple at Chichen Itza (Kepecs et al. 1994:143). The presence of a ceremonial center and elite architecture suggest that Emal was one of the more important Yucatec salt sites for the Itza, particularly because the quality of the salt was considered the best in the area. Emal salt was considered a luxury

good, “a preferred elite condiment far beyond the Itza region” (Kepecs, Feinman, Boucher 1994:149) in northern central Yucatán.

Cotton

At the time of the Spanish conquest cotton was recorded in numerous jurisdictions in the Yucatán Peninsula as both a raw material and a manufactured item (Pina Chan 1978:40). Large quantities of spindle whorls have been recovered at Chichen Itza, specifically in elite residential areas. Based on the map of “Maya Commerce 1400-1600” in the Yucatán Peninsula by Piña Chan (1978:Fig.12) cotton was produced in Acalan, Campeche, Sotuta, Ah Canul, Cehpech, and Uaymil. These areas of cotton production may reflect similar areas of production during the Terminal Classic and Postclassic. According to Stark et al. (1998:10) “cotton had a dynamic role through Mesoamerican history because it could at once become more widespread in access and still be elaborated as a prestige item.”

The management and control of cotton production was probably one of the most important specializations for the Itza. The intense use of this product to make items such as clothes, armor, shields, and banners required a high level of production when considering the dense population, quantity of elites, and large size of an active military.

Cacao

Since at least the Preclassic era, cacao was a primary luxury good in Mesoamerica. Used specifically in ceremonial events, cacao was a highly desired commodity and traded over long distances. Cacao was probably cultivated as a cash crop

in areas such as the lower Motagua Valley, the Carribean coast, and the Pacific Coast. Chichen Itza had very close links, specifically, to the Soconusco region of Chiapas and the Pacific Coast of Guatemala where the iconography and styles are similar, primarily in El Baul and Cotzumalhuapa (Schmidt 1999:444). Although the degree of contact between Chichen Itza and this region have yet to be determined, it can be assumed it was significant. Critical elements of the Itza culture such as: the production of Plumbate ceramics (a diagnostic ceramic type at Chichen Itza), the cultivation of cacao, and the origins of the ritual ballgame have all been traced to the Soconusco region (Schmidt 1999:444).

Although not as abundant, another source of cacao, and perhaps the most ritually significant for the Itza, was the Yucatán Peninsula. Taube (1994:227) suggests that the image from the Temple of the Owls capstone portrays K'awil inside a moist *k'o'op,* or sinkhole. Gomez-Pompa et al (1990:253) recently found evidence that the ancient Maya managed microenvironments where cacao and other tropical tree species grew within the sinkholes of the Yucatán; however, cacao orchards were also recorded in various towns during the Spanish conquest and colonialization period (Piña Chan 1978). Cacao trees have also been found in Chichen Itza (Schmidt, personal communication).

5. Imported Cultural Material

Evidence supporting the importation of a wide-range of cultural material into Chichen Itza primarily comes from artifacts recovered from the Cenote of Sacrifice. In addition to durable artifacts such as those made of stone, a variety of more perishable items such as textiles and wood were also recovered from the cenote. These were found

in a remarkable state of of preservation because lack of oxygen in the waters of the cenote. The collection from the cenote includes the following: textiles, tecali (calcite) and marble vessels, green obsidian disks, turquoise, green and gray tubular spiral beads, copal, jade, spondylus shell, tumbaga (copper/gold alloy), and gold. Most of the cultural material recovered was imported for example: copper/gold (Central America), spondylus shell (coastal areas), turquoise (Northern Mexico), green obsidian (Central Mexico), and jade (Guatemala). However, items such as the textiles may have been produced locally while others were imported from the Gulf Coast, Lowlands, and Pacific Coast.

Archaeological evidence suggests that the majority of the imported goods, particularly luxury goods, probably passed through the eastern coast of the Yucatán peninsula during the Early Posclassic period. For example, metal, particularly gold and tumbaga from southern Costa Rica and western Panama has been found at Cozumel and Santa Rita Corozal. A possible explanation for its presence may be that the gold passed through these ports in route to inland cities like Chichen Itza (Gonzales de la Mata and Andrews 1998:463). Jade, another valuable luxury good, from the Motagua Valley in Guatemala, has been recovered from Quintana Roo and Belize suggesting that it moved up the coast from the mouth of the Motagua River (Gonzales de la Mata and Andrews 1998:463).

This evidence does not necessarily confirm the trade routes during the periods in question, but it serves to suggest that at least a type of down-the-line trade took place. Other material evidence confirming long-distance trade has been found through controlled excavations at the site. Imported ceramics from north and central Mexico, such as the area of Tula, are extremely rare (Schmidt 2003:5). Imported ceramics such as

Tohil Plumbate and Fine-Orange, as well as obsidian, provide additional clues regarding the level and organization of exchange that took place during the Terminal Classic and Early Postclassic periods.

Tohil Plumbate Ware

Plumbate ceramic ware production originated in the eastern Soconusco coast. Plumbate ceramics were highly valued objects because of their unique vitirified, unpolished, and highly lustrous slip. Three compositional groups of Plumbate are distinguished chronologically by their distribution: Guayabal Plumbate, San Juan Plumbate, and Tohil Plumbate (Neff 1991:300). Of the three compositional groups, Tohil Plumbate is the latest and the most widely distributed throughout Mesoamerica.

During the Postclassic, Tohil Pumbate is usually associated with other luxury ceramics, Nicoya Polychrome from Costa Rica. Tohil Plumbate, but specifically Tohil Plumbate Lujoso, is especially represented in Chichen Itza and Tula (Neff 1991:300), indicating a demand for this item which further associates these two centers.

Interestingly, with the exception of Chichen Itza, it is rare to find sites with imported ceramics like Tohil Plumbate and Fine Orange in the interior of the peninsula; but at sites on the Yucatán's coast these ceramics are found in greater quantities (Andrews 1978:79,82).

Obsidian

More than 60 percent of the obsidian from Chichen Itza comes from the mines of Ucareo, Michoacan, and Pachuca in Central Mexico (Schmidt 1998:445). At the Itza controlled port of Isla Cerritos, Pachuca obsidian constitutes 48 percent of the total assemblage (Kepecs et al. 1994:151). A small port with similar quantities of Pachuca obsidian as Isla Cerritos is Wild Cane Cay, Belize (Jackson and McKillop 1989:105). Also linked to Wild Cane Cay's assemblage of green obsidian and Tohil Plumbate is Ambergris Cay and False Cay (Jackson and McKillop 1989:105). Wild Cane Cay, positioned at the "southern terminus of the circum-Yucatán coastal canoe trade route" during the Postclassic obtained obsidian from six outcrops from Central Mexico, Guatemala, and Honduras (McKillop 2005:142). Most of the Yucatec coastal sites where green obsidian was noted also contained clear obsidian from the Pico de Orizaba source in Veracruz (Kepecs et al. 1994:151).

6. Development of Long-Distance Trade in the Yucatán

The earliest ceramic complex detected at Chichen Itza is Motul (Pérez de Heredia Puente 2004:9). The middle phase of Motul has been associated with two large platforms: one sustaining Three Lintels and the other the structures of Phalli and the Initial Series (Perez de Heredia Puente 2004:9). The late phase of the Motul Complex, dated approximately A.D. 700-800 (coinciding with Pollock's Early Puuc architecture), was recorded in the fill of Puuc style buildings such as Akabdzib, Casa Colorada, Palace of Phalli, and Three Lintels (Perez de Heredia Puente 2004:9). In this period Chichen Itza was an emerging center. In the Pasión-Usumacinta region (A.D. 760-830) major cities are abandoned (Demarest et al. 2004:551), while Seibal (A.D. 830-930) flourished

with new mixtures of styles and political structures (Tourtellot and González 2004:62) (See Fig.39). From this particular region in A.D. 790 the murals at Bonampak were painted, portraying scenes of a royal court involved in accession rituals and the torturing of prisoners.

In the following period, considered the Early Phase of the Kakupakal/Cehpech Complex A.D. 800/830-920/950 at Chichen Itza, Maya glyphs were painted and carved in stone and wood. K'ak' U Pakal K'awiil is mentioned the most in the text. Glyphic texts record fire drilling events, declaring ownership of a structure, the dedication of a lintel, possession of a house belonging to gods Yax ?-che Kan and Yax U K'uk'um K'awiil (Monjas Lintels), the arrival of K'ak' U Pakal at a ballcourt (Yula, Lintel 1), and other individuals such as K'ak U Pakal K'awiil's brother K'inil Kopol; Lady K'ayam, mother of K'ak' U Pakal; Lady Toon Ajaw, grandmother of K'ak' U Pakal; and K'inich Jun Pik To'ok', lord of Ek' Balam (Grube et al. 2003). During this ceramic complex, Chichen Itza was a large center with Puuc monumental architecture and art. This period is designated as the Late or Classic Puuc architectural style (Pollock 1980:589; Kowalski 1987:49) when Puuc cities (i.e. Uxmal, Kabah, Oxkintok) were at their height.

The rulers of Puuc cities were utilizing "southern lowland Classic Maya concepts of kingship" (Carmean et al. 2004) such as erecting stelae and carving monuments with hieroglyphic writing. However, incorporated in these traditional symbols of rulership were indicators that some centers (Oxkintok, Xcalumkin, Ah Canul Province) experimented with variations of shared rulership (Carmean et al. 2004). For example in Xcalumkin inscriptions dating between A.D. 728 and 761 (Becquelin and Michelet 2003:137) consist of dedication texts and "name tagging" phrases revealing at least

fourteen named individuals, almost equally distributed. Revealing “that the elite of Xcalumkin was similarly organized to that of Chichen Itza a hundred years later” (Grube 1984:320).

The Las Monjas painted capstones (see Fig.39) were probably painted in this period as were approximately one hundred others throughout the Puuc and Chenes zones in the states of the Yucatán and Campeche. In the Puuc zone, numerous small scale states flourished, eventually filling this demographic area and may have restricted communities from moving freely to acquire resources. Local communities might have specialized in the production of optimal resources in their area to exchange with other communities, resulting in a certain level of interdependence of an exchange system providing goods that are not necessarily available in their area. Perhaps in the earlier stages this relationship between centers was self reinforcing, a “positive-feedback loop” (Price 1978:233). The capstones may be an indicator of this interaction, a monument celebrating the successful completion of a structure symbolizing the prosperous growth of a community. An appropriate tribute would conceivably acknowledge the ruler responsible for growth, and/or K’awiil, a god associated with fertility, wealth, power and abundance. The relationship and exclusivity of individuals involved in this exchange network are suggested by the utilization of glyphic texts, images of cacao, bundle offerings (possibly mantles), and K’awiil which are associated with wealth, elites, power, and exchange.

Participants in this exclusive network probably included chiefs and kin elders overseeing the production and movement of goods between individuals who are more or less equals. Exchange of goods may have been partially based on a concept of gift

exchange. Settlement pattern studies in the northeastern Puuc reveal that prior to Uxmal's domination in the area, the region was ruled in a fragmented fashion by a number of more-or-less equal sites (Dunning and Kowalski 1994:76). As the intensity of exchange and population increased, production demands may have created a greater number of craft specialists who did not have control or access in the exchange because goods moved toward the center and then out to the community.

Some centers might have eventually dominated the redistribution of goods and the society became more stratified with increasing numbers of specialists and elites. The eventual growth and dominance of centers such as Uxmal, Kabah, Chichen Itza, and Ek' Balam (see Fig. 39) may have been due to charismatic leaders, accessibility to essential resources, such as water (a critical factor in the Northern Yucatán), buildup of military strength, and/or the formation of essential kin-based or fictive kin alliances. In A.D. 800-821 the murals of Mulchic, located between Uxmal and Kabah, are painted which, according to Kowalski (1991:403), feature military themes that might portray a collaborative campaign with Uxmal to expand control towards the eastern Puuc region. At other sites such as Oxkintok, Sayil, and Kabah, incorporation of military images reveal rising competition and threats in the area. In the northern Yucatán, Ek' Balam and Chichen Itza dominated this zone with a smaller center, Ichmul de Morley, located between the two of them. Ek' Balam located approximately 51 km northeast of Chichen Itza experienced its apex during the Terminal Classic. The site combines Puuc, Southern Lowlands, and Chenes styles of architecture and art (Ringle et al. 2004:499). In approximately A.D. 850 Ek Balam consolidated domain over the central-eastern Yucatán under the rule of Ukit Kan Lek.

The uniqueness of this period, essentially a cultural synthesis, alludes to another dynamic in the economic system. The dynamic, I believe was the appearance of more agents facilitating trade of luxury goods between elites at greater distances, such as a rootless merchant class. The appearance of numerous centers possessing unique characteristics while incorporating eclectic mixtures of art and architectural styles spanning across Mesoamerica (Central Mexico, Gulf Coast, Southern Lowlands, Western and Central Yucatán); the absence of a dominant controlling center during the Epiclassic/Terminal Classic; the increased need to acquire and carry goods from a distance; merchants portrayed in monumental art; and intensified protection of site centers suggest an advanced form of interregional and intraregional trade.

The profession of trader or merchant may have existed as early as the Preclassic period in Mesoamerica when long-distance trade was widely practiced. In the Classic period, Teotihuacan enclaves existed in the Maya region, such as Kaminaljuyu, and foreign enclaves were established in Teotihuacan. Chadwick (1995:147) suggested that the *mixtecas* of Teotihuacan and Tula were the porters of several elements of high culture in Mesoamerica and the precursors of the Aztec *pochteca.* In the chronicles, merchants have been identified under various names, such as the Olmeca-Xicalancas, Nonoalcas, and Tlailotlaques (Chadwick 1995:147). The Olmeca-Xicalancas from the Gulf Coast, likely a group of merchants, may have controlled commerce and later controlled Cholula (Lopez de Molina 1995:172).

Doubtless, several ethnic groups may have participated in this lucrative trade. Avoiding the issue of ethnic identity of merchants, the Itza, the Olmeca-Xicalancas it is apparent that merchants were present in the archaeological record (paintings in the Red

Temple at Cacaxtla, friezes at Tula, Cholula, Tajin Chico-building of the Columns, Cerro de las Mesas, Santa Lucia Cotzumalhualpa all depict likely merchants) facilitating long-distance trade for several centers.

At Chichen Itza, merchants are found in the murals, ceramics, columns, and possible sculpture in the round (fragments in the Museo Regional de Merida, Yucatán).



Figure 34 Ceramic fragment showing merchants recovered from the Sacred Cenote. From Ediger (1971:Fig. 96k)

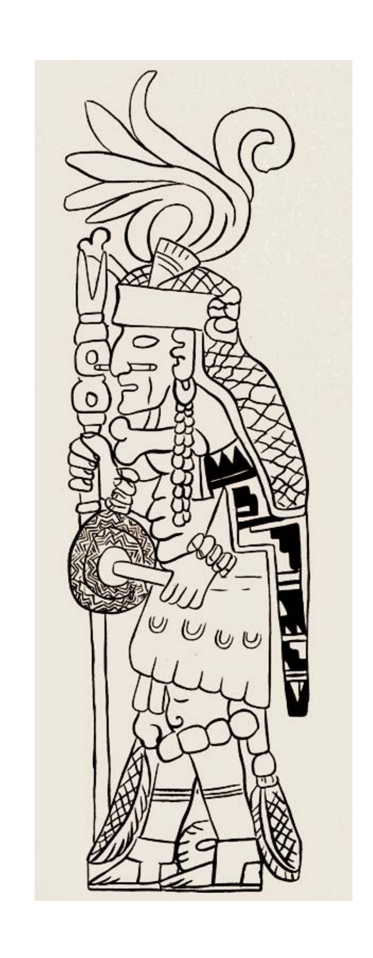


Figure 35 Merchant carved on Temple of Chac Mool column. From Morris et al. (1935:Fig.304)

Webb (1972:162) notes “artistic representations of items associated with merchants, merchant gods, or wealth” include: “fans, staves, tumplines, specialized headdress, packs, and bags.” The distinction between merchants and merchant gods, God M, or God L, or Ek Chuah can to a certain extent be determined by their context. For example, in Chichen Itza, the individual identified by Morris (1935:Fig. 304) as an “Old Man with a Bone” (Fig.35) in the painted benches of Chac Mool and the stone columns may portray a merchant because of his costume, age, and participation in a ceremonial event.

According to Polanyi (1975:142,139) merchants' relation with the community varied in different types of societies, some considered upper class and others of lower class. Upper class traders maintained a relationship with rulership and government, while the lower-class traders' dominant part of their livelihood was manual labor (Polanyi 1975:139). Considering that the evidence of merchants in Mesoamerica is found in monumental art and in prominent locations in centers, at least some of the merchants may have been considered upper class individuals. In the Late Postclassic, the top-ranking Aztec merchant, the *pochteca* (particularly slave traders) were considered persons of great wealth and highly esteemed (Chapman 1957:120).

So highly esteemed were these individuals, Sahagún (1981:30) noted that for the Postclassic Aztec, "For verily so splendid was considered the position of the merchant, the vanguard merchant, that none lived a perverse life. The words of the old merchants were well regarded, well treasured." Sahagún (1981:32) adds that "they (the merchants) greatly feared notoriety, the praising of one. It was for this reason that Moctezuma, as hath been told, especially esteemed the old merchants, the disguised merchants, those who ceremonially bathed slaves, the slave dealers. He made them like his sons." The king, chief, or rulers of Chichen Itza probably did not personally partake in all trade transactions, especially as the city grew in size. The responsibilities likely extended out to the rulers' "immediate entourage." The procession of individuals depicted on the Temple of the Chac Mool benches suggests the "king's merchants, were probably ranked with army generals, civil governors, and other high officials" (Polanyi 1975:138). The diverse assemblage of individuals, such as the merchants and warriors on the benches

confirms specialization of personnel. The seating of the individuals on the benches reflects their status and order in rank within the society.

With the Temple of the Chac Mool, monumental painting shifted, becoming more publicly visible and diverging from Classic Maya styles. Functioning as an administrative structure, the art in the Temple of the Chac Mool includes a diverse group of individuals (warriors, deity impersonators—representing possible kin groups, merchants, and priests).

In painting, processional arrangements occur in the Classic period in the Maya region, but what makes these representations in sculpture and painting unique is the absence of a central figure, as also noted at Teotihuacan. At Teotihuacan, Pasztory (1988:74) discusses how it is expected to find murals on shrines and porticos that consist of repetitive and single design motifs. However, it is rather uncommon to find such elaborate murals completely covering compounds or administrative religious centers, as is the case in Techinantitla. Furthermore, the subject matter in the murals from Techinantitla demonstrates a change from the more traditional images of the city. For example, the borders of the murals became more ornate and personal, as opposed to the murals in the earlier phases in which borders were strictly monotone, simplistic, and impersonal. While murals of processional scenes are abundant throughout the city, the individuals are distinguished more by the later phases of Teotihuacan. Found in ceremonial spaces, the ritual scenes are primarily acts of giving offerings by richly attired human and animal figures shown in profile (Ruíz Gallut and Uriarte 1999:51). However, in the later murals more glyphs, name signs, and possibly high-ranking

individuals (indicated by elite tassel headdress) are represented, more than other existing murals in the city (Pasztory 1988:75).

The images of large stylized serpents across the interiors of the Temple of the Chac Mool and Temple of the Big Tables-substructure share similarities with Teotihuacan's mural style and content. The flowering stems projecting from their bodies have been compared with sprouting lineage/vegetative regeneration. Rays projecting from the serpent are similar to the Postclassic Xiuhcoatl, associated with war, sun, and fire. Xiuhcoatl often appears opposite Quetzalcoatl in the Basin of Mexico, linked to fire and the destructive heat during the annual dry season, a critical stage in crop production.

Both descriptions would seem appropriate for this setting, with a procession of distinguished community members giving offerings, possibly requesting aid in the success of a military campaigns, or assistance in rapidly ending a dry period.

In approximately A.D. 900/950 the Kukulkan/Sotuta ceramic complex is designated as a period when the "Maya" and "Toltec" architectonic styles of Chichen Itza overlap. This ceramic complex indicates an east-west territorial division of the northern Yucatán Peninsula, with Coba controlling the east and Chichen Itza, the west. Based on the presence of Sotuta ceramics and obsidian, Chichen Itza influenced and possibly controlled the territory from Tabasco and western Campeche across northern Yucatán to the northeast coast of Quintana Roo. Coba during this period seems to have maintained control of the central east coast, but data from this area are scant (Andrews and Robles 1985:69; Rice and Forsyth 2004:52).

Replacement of the Temple of the Chac Mool with the Temple of the Warriors Complex reflects continuous growth in the city. Observation of the columns and overall

size of the structure indicates the incorporation of more military, political, and elite members into the sociopolitical structure of the city. The possible association with agriculture in the Temple of the Chac Mool temple is one of very few found in painting. The murals at Chichen Itza do not reflect a preoccupation with agriculture as do several murals from Teotihuacan. On the contrary the murals, particularly from the Temple of the Warriors, seem to show a shift in interest in painting at Chichen Itza from land resources to marine resources. The Temple of the Warriors' murals may be documenting the wealth of resources available in the region and the Itza's particular interest in marine resources. Images further seem to describe how the city acquired some of these goods and captured prisoners or slaves by conducting raids, and, collecting tribute (Fig.36-38). If a politician from a nearby city was invited to a ceremony at the Temple of the Warriors, which in all likelihood they were judging from the columns, these mural images were intimidating and probably functioned as a tool to form alliances with this growing state power.

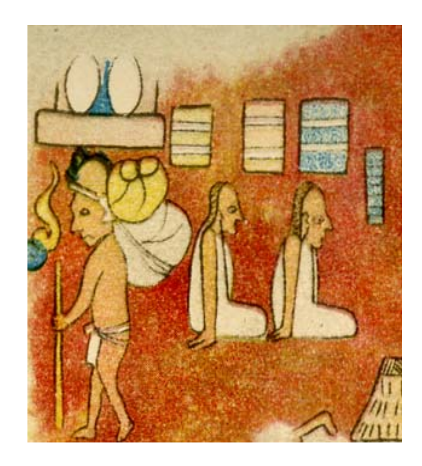


Figure 36 Evidence of tribute as seen in the Temple of the Warriors, Section of Fishing Village Mural. From Morris et al. (1935:Fig.188)



Figure 37 Evidence of tribute as seen in the Temple of the Warriors. Mural fragment. From Morris et al. (1935:Plate 154b)



Figure 38 Sacrifice as seen in the Temple of the Warriors. Mural fragment. From Morris et al. (1935:Plate 145)

Monumental art in various sections of Chichen Itza imply that dominant families and lineages must have shared a certain level of power (Wren and Schmidt 1989:215), with more than one community participating in the success of the polity. This process of cultural synthesis was carefully manipulated in the city to encourage a sense of allegiance by extending kinship systems. Similar to Sahlins's (1972:133) interpretation of kinship as "a social relation of reciprocity, of mutual aid," the Itza generosity may have became a "manifest imposition of debt, putting the recipient in a circumspect and responsive relation to the donor." The gift of immortalization in stone, receiving desirable luxury goods, and participating in the growth of this center demanded patronage and relinquishment of a certain level of authority and wealth from nobles of competing centers. As Sahlins suggests "the indigenous category for exploitation is reciprocity." The totality of the Temple of the Warriors Complex (murals, reliefs, architecture) may describe the alternatives presented to smaller polities by the Itza in the Early Postclassic: patronage or elimination.

Elimination does not necessarily imply that competing centers were destroyed, then abandoned; rather they may have faced the threat of being taken out of the loop in terms of access to desirable regional resources and foreign luxury goods that were not as available in the traditional system. Briefly, Chichen Itza may have shared its wealth with other centers. For example, in A.D. 900 Lord Chaac, ruler of Uxmal, established a military alliance with the Itza, possibly "to facilitate Uxmal's expansionistic state-building in the eastern Puuc region" (Kowalski 1999:409). Lord Chaac is depicted on Stela 14 wearing a "broad-brimmed, sombrero like headdress resembling ones worn by Chaac impersonators on the painted benches in the Temple of the Chac Mool at Chichen

Itza" (Kowalski 1999:409). He is standing in "a formalized heel-to-heel pose and wears traditional Maya regalia of royal power; small *ahau* belt masks, oliva shell belt 'tinklers', a sandal type commonly worn by warriors at Chichen Itza" (Kowalski 1999:409), and a circular shield decorated with crescent-shaped motifs identical to those on the shields of Upper Temple of the Jaguars (Kowalski 1999:291).

The eastern polity of Coba continued as a powerful competitor for Chichen Itza. Archaeological evidence indicate that the Itza cultural influence at Coba was minimal, suggesting a possible turbulent relationship. Diagnostic Itza ceramics are almost totally absent at Coba, while the continuity of the Coba diagnostic Cehpech ceramic tradition "hints at a certain degree of isolation" (Andrews and Robles 1985:69). However, by A.D. 950-1000 Coba's control of territory was reduced. In approximately A.D. 950 monumental construction ceased in the Puuc area as well, and activity may have diverted towards the Itza capital.

The expansion of the Temple of the Warriors perhaps occurred during a period when Chichen Itza solidified alliances, resulting in economic control of coastal towns and smaller centers in its immediate vicinity. This control resulted in a surplus of trade wealth that could be channeled towards the hiring of additional war bands. These war bands may have consisted of "individuals from defeated tribes, exiles, and other rootless men" (Webb 1975:180), in this case, perhaps some of the Puuc centers and other areas of the northern Yucatán. Rulers from other polities may have relinquished their power and redirected their economic resources, as Chichen Itza built an army and a larger internal bureaucracy.

According to Johnson and Earle (2000:252), as an economy intensifies "competition for the most productive resources and for objects of trade creates an armed force in the form of warrior elite." Warriors are responsible for defending the territory of the group and maintaining peace within the territory. The warriors ensure that the commoners have access to resources, but in return the commoners have to be willing to pay in services or goods the price for such security to the warriors and to the elite or lords they represent. The murals from Las Monjas and the Upper Temple of the Jaguars (see Fig. 39) perhaps represent Chichen Itza's climax where war has become a preoccupation in terms of maintaining power, expansion, intimidation, and fueling an ideological system.

Ideology is a major component of complex societies and serves as a powerful source of legitimacy for the ruling elite. Ideology functions by validating "the economic and military arrangements the local economy has become dependent upon" (Johnson and Earle 2000:252). In the case of Chichen Itza, the ruling class creatively manipulated ideology to appeal to an audience larger than the local community by staging extraordinary public ritual events in and near the Great Ballcourt. The enormous monumental structure in the principal zone of the site "was built for everyone to see and not for the elite" (Greene Robertson 1991:109). The Great Ballcourt was a "public place for all to come to from far and wide to see the 'symbol' or 'billboard'" (Greene Robertson 1991:109) of an "international" belief system.

Figure 39 Proposed Chronology for Chichen Itza Murals Compared with Chronoloy of Contemporaneous Centers

Murals	Date (A.D.)	Chichen Itza Ceramic Complex	Puuc (nw) Culture History	Northeastern Culture History
Las Monjas Capstones	750/800-900	Kakupacal/Cehpech Complex	770-950:Puuc apogee 850: Oxtinkok, new style-"Mexican" 800-821: Mulchic murals	760-850: major cities abandoned; flourishing states with new mixtures of styles and political structures
Temple of the Tables-sub	850/950	Transitional Early Phase Kukulkan/Sotuta Complex	850: Ek Balam, consolidated domain over NE Yucatán, Ukit Kan Lek	
Temple of the Chac Mool benches	850/950	Transitional Early Phase Kukulkan/Sotuta Complex	900: Uxmal, alliance with Chichen Itza	
Temple of the Chac Mool Murals	850/950	Transitional Early Phase Kukulkan/Sotuta Complex	950: Puuc area, cease monumental construction	
Temple of the Tomb and Painted Capstone	900/950	Transitional Middle Phase Kukulkan/ Sotuta Complex		
Temple of the Owls Capstone	950/1000	Middle Phase Kukulkan/Sotuta Complex		950/1000:Coba, reduction of territory
Temple of the Warriors	950/1000-1100	Middle Phase Kukulkan/Sotuta Complex		
Northern Colonnade Capstone	950/1000-1100	Middle Phase Kukulkan/Sotuta Complex		
Thousand Columns Capstone	950/1000-1100	Middle Phase Kukulkan/Sotuta Complex		
Upper Temple of Jaguars	1050-1150/1200	Late Phase Kukulkan/Sotuta Complex		1100/1200: Coba, 2nd reduction of territory
Las Monjas Murals	1050-1150/1200	Late Phase Kukulkan/Sotuta Complex		

VII. Conclusion

Throughout history economic activities have been embedded in social relations. In several societies, trade or exchange was controlled by the elite most common through the form of reciprocity or redistribution. In Mesoamerica, there was a significant rise in dominant centers and of elites following the decline of elite activity in the Southern Lowlands and the collapse of Teotihuacan. Numerous elites wanting luxury goods increased demand. The acquisition of such goods from their sources resulted in occasional raids to force a community to relinquish their property, pay tribute, and/or establish interregional and intraregional political and economic alliances. During this transitional period interaction and growth may have intensified in the Maya northern lowlands. However, due to variation in regional artistic and architectural styles, overlap and partially sequential diagnostic ceramic complexes in various areas, and the absence of an emulated dominant center it is apparent that the northern lowland centers experienced a sociopolitical restructuring. Stylistic differences, external influences in art and architecture, and iconography allude to changes in the traditional political system, decentralization, and less emphasis on agriculture, suggesting the Maya were moving towards a more stratified society creating a further complex economic system.

Broadening specialization of personnel in the political, economic, and military system was essential to administer a multifaceted economic arrangement. Integrated into this structure, during the Late Classic-Early Postclassic period merchant elite class may have grown, that held high-level administrative positions and became economically powerful in several Mesoamerican centers. Similar to Cholula and Cacaxtla, Chichen

Itza profited from their geographic position with the utilization of merchants mutually benefitting both the cities and this elite class.

Chichen Itza's location may have allowed them to exploit both land and marine resources and control long-distance trade over coastal routes. In the Temple of the Warriors, the "Fishing Village" mural scene and some other painted fragments may portray ports of trade. According to Frei Berdan (1975:179), ports of trade are "intentionally neutral locales where representatives of political entities meet for the purpose of conducting commercial transactions". The possibility of proving that this location functioned as a port of trade is difficult; however, there is evidence of commercial activity and a relative sense of calm when compared to other paintings in the temple. Ports of trade along the Yucatán coast most likely functioned as neutral zones where representatives of political entities, such as merchants met.

Chichen Itza's control of several coastal sites probably contributed to its consolidation of power and surplus. Specifically, when the Southern Lowlands and the Northern Lowlands experienced an extended period of drought (Dahlin 2002:327) the Northern Maya flourished and continued to grow in the following centuries. The increased reliance on maritime resources and trade may have been an adaptive response (Dahlin 2002:237) to constant failures in crop production.

In sum, the accumulation of Itza wealth and power may have been influenced by an effective administration of coastal resources and control of long-distance trade networks, in addition to the mobilization of a military elite force and the manipulation of ideological beliefs from Central Mexico, the Gulf Coast, and Maya region.

The ideological beliefs found in monumental art are impossible to interpret literally. Nevertheless, it is apparent that art has functioned as a powerful tool for several societies to describe events, memorialize individuals, promote ideologies, and create a sense of unification for a specific cause. In the Southern Lowlands, art was utilized by the elites to legitimize their position in society; however, by the Late Classic-Early Postclassic the Maya in the Northern Lowlands began to use art as a tool to unify a more diverse audience.

Analgous to the shift detected in Maya art in the Terminal Classic is an art movement that occurred in the early 1900s in Mexico following their Revolution. During this movement, artists such as David Alfaro Siquieros, Diego Rivera, and José Clemente Orozco strived to create and produce art for the majority of Mexican citizens. The manifesto by the Syndicate of Technical Workers, Painters and Sculptors of Mexico drafted in 1922 by muralist, David Alfaro Siqueiros proclaimed that "our fundamental aesthetic goal must be to socialize artistic expression and wipe out bourgeois individualism" (Siqueiros in Rochfort 1993:39). Following this proclamation several Mexican artists began to shift their attention from producing strictly portable art for the fortunate few to creating monumental art for the public masses. As a result, murals depicting detailed historical narratives of Mexico's past and present were painted on hundreds of public places throughout the country. Murals became a tool for artists to voice historical injustices and to a certain extent empower a silent audience—the poor, indigenous, and disenfranchised.

Historically, utilizing art as a form of cultural empowerment during social movements has been documented in several countries such as Mexico, China, Cuba, and the United States. Unfortuately, detecting a social movement in the art of a prehistoric society is difficult without written documents describing such an event. Nevertheless, parallels exist between the past and present.

For example, the art of the Maya, between approximately A.D. 850 to1100, reveals a shift in content from images depicting royal activity with the aid of an exclusive writing system to scenes acknowledging numerous individuals and specialized personnel. In Chichen Itza, murals continued to be displayed in more exclusive locations. However, the actual size of the paintings changed as did the content from supernatural themes and individuals with glyphs found in the Las Monjas and Temple of the Owls capstones to describing events with detailed narrative illustrations and speech scrolls. First noted in the Temple of the Chac Mool benches and further defined by descriptive narratives in the Temple of the Warriors, Upper Temple of the Jaguars, and Las Monjas.

Similarly in Mexico, following the manifesto of 1922, proclaiming that art must reach out to a larger and more diverse audience the size and content of paintings changed. Specifically, through the visual aid of murals, Mexican artists chose powerful narrative images to describe events in a language that both the literate and illiterate members of society could understand and interpret. The intent of the Early Postclassic Maya and the Mexican artists in the 1920s was not similar; however, their conscious effort to utilize public works of art to inspire an ideological/social/economic cause in an increasingly more complex and diverse society is noteworthy.

Several Mesoamerican centers during the Terminal Classic were creating "complex ties that cross-cut social and political domains" (Ensminger 1996:25) between several participants seeking to reduce transaction costs. These links detected in sculpture, architecture, ceramics, and iconography suggests that centers shared similar ideological orientation, hence, ensuring a certain level of predictability and trust between the parties involved. With "primitive" trade not just anyone can get into the act of trade, "trade is an exclusive relation with a specific outside party" (Sahlins 1972:298). Trade partners are not established through the prices between buyers and sellers, but rather through their social relations (Sahlins 1972:298). During Chichen Itza's height in the Terminal Classic-Early Postclassic monumental art suggests that the city flourished due to the manipulation of powerful social relations, an active merchant and military class, and similar ideologies shared between local and regional partners

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APPENDIX-MAP OF UPPER TEMPLE OF JAGUARS MURALS RECORDED 2001

Background watercolor paintings from Adela Breton, reprinted in (Coggins 1985)





KEY

Stone, with no stucco

Stucco, with modern grafitti

Stucco very faint with traces of painting

Mural visible but faded

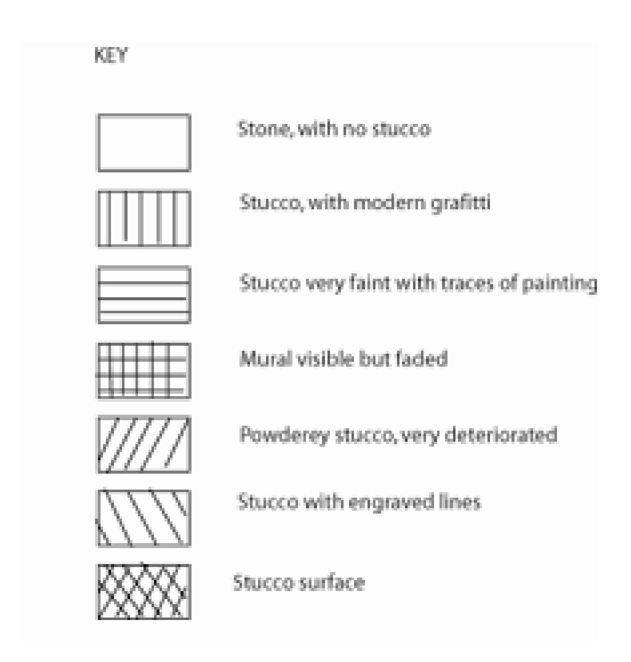
Powderey stucco, very deteriorated

Stucco with engraved lines

Stucco surface






KEY
Stone, with no stucco
Stucco, with modern grafitti
Stucco very faint with traces of painting
Mural visible but faded
Powderey stucco, very deteriorated
Stucco with engraved lines
Stucco surface